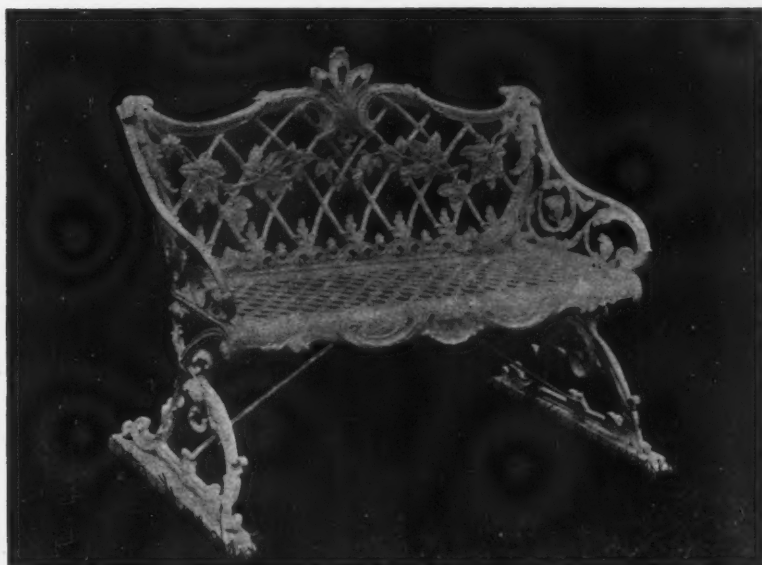


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The River Nene flows through the centre of Wisbech and is the source of its past prosperity and its unique character as an inland port. It is also the source of the town's architectural distinction, which lies largely in the two cliff-like terraces of Georgian houses which line the wide roadways, known as Brinks, either side of the river. Above is the North Brink, seen from the opposite side. On the extreme left is Bank House, the finest of all the Georgian houses in Wisbech. At the far end is the pedimented façade of the Town Hall, opposite which a bridge crosses the river and connects the North Brink with the centre of the town.

PLATE II

December 1939







One of Wisbech's staple industries is brewing and the town possesses several fine early nineteenth century brewery buildings situated at various points along the river. That illustrated is on Nene Quay, quite close to the centre of the town. It is a good example of the nobly utilitarian architecture of its period. Its small doorways set in expanses of plain brickwork give it a startling scale.

PLATE iii

December 1939





of the Lords Lieutenant of Cambridgeshire. It appears on the extreme left of Plate ii. It is notable for two things: for the elegant side pavilions added later in unusual but impeccable eclectic taste (see figure 3) and for the rich carving inside (see Plate v). Between the gabled Gothic pile and Bank House a different more modest character is introduced by the Quaker Meeting House, a low stone building in Greek revival style, dated 1854. Between Bank House and the town stands a row of those tall Georgian houses already described, very urban and sophisticated in style, elegantly detailed. They are still in good order. The largest now display the well polished brass plates of doctors of long standing. Others have flat bay windows with a nautical flavour, again inviting comparison with Brighton. Finally, facing the bridge-head, is the Town Hall or Corn Exchange, flanked on each side by a bank. The former is another good building with the appropriate formality of a stone façade adorned with Ionic pilasters and a pediment. The latter alas only illustrate the error of trying to design contemporary buildings "in character." Their kind of laboured pastiche, known as Bankers' Georgian, is now indeed one of the recognized cautionary styles. Here again the wilful unorthodoxy of the Gothic pile further down the Brink has a moral for those whose idea of good taste consists in dressing up instead of in being themselves.

The South Brink is shorter than the North. It begins, at the end farthest from the town, with the oddly named Station Master's House, a name that appears to date from a period long before railway stations. This house is now being



A corn merchant's stand, one of several dozen ranged within the Town Hall on market days, representing the exchange and export of agricultural produce on which the history and prosperity of such places as Wisbech has always been based.

demolished: a loss to the sum of decent Georgian houses in Wisbech, though it stands sufficiently apart from the rest for its destruction not to threaten the appearance of the South Brink itself, except as an alarming precedent. Distinguished features of the South Brink are a

[continued on page 239]



Near the northern exit from the town is the old cemetery containing a charming stucco mortuary chapel of the Greek Revival in a sad state of disrepair. A corner of it can be seen in the photograph of a remarkable iron tomb, left, and it can also be seen in the background, flanked by the Wellingtonia and Monkey-puzzle trees of its period, in the detail of the cast-iron cemetery gates, right.

1860-1940: A COMPARISON

A number of photographs of Wisbech, taken during the 'fifties of last century by a local amateur, Samuel Smith, are preserved in the Wisbech Museum in the form of the original Talbot-Type paper negatives. Prints from some of these negatives are reproduced below and on the following pages together with equivalent views taken today, for purposes of comparison. They show that up to the middle of last century Wisbech had survived as an almost unaltered example of the Georgian market town. Today, although subsequent development has broken up the continuity of the Georgian façades, the advent of plate glass and multiple trading has meant the disappearance of the Georgian shop fronts and the beautiful Butter Market has gone, the town as a whole still retains its original character, more strongly in some parts than in others and particularly along the river banks where the life of the town has always centred.



THE BUTTER MARKET

Just within the memory of the oldest inhabitants a Georgian Butter Market stood in the centre of Wisbech. It was a square brick building with an arcaded lower storey, of the pattern familiar in many market towns. The photograph on the left was taken in 1856. The Butter Market was demolished in the same year. On the right is the same site today, occupied by a Gothic memorial to Thomas Clarkson, the anti-slavery agitator and a native of the town.



THE HIGH STREET

The High Street has not changed fundamentally between 1854, left, and today, right; but modern commercial development has meant the loss of the reticence and the consistent scale given by the neat Georgian shop fronts. Plate glass and advertisements have transformed the lower storeys, but the only change in the superstructures is that the gabled medieval group on the right has given way to an Edwardian neo-classical façade. Note in this and the other comparative photographs how much more character the cobbled road-surface gives to the earlier view.



'WISBECH, 1860-1940: A COMPARISON



THE MARKET PLACE

The Market Place, like the High Street, has only substantially changed between 1857, left, and today, right, in the lower storeys of the houses, though one house at the far end has been entirely rebuilt. The loss of the regular pattern of the shop fronts and the growth of advertisement signs and lettering has naturally resulted in some loss of character, but here, as the market itself still survives, the stone paved road surface has not disappeared altogether. The cast-iron pump has given way to a Victorian drinking fountain at the far end. The pedimented building in the far left-hand corner is the Rose and Crown Hotel, which has only suffered the addition of an ugly iron and glass porch.



T H E N



WAREHOUSES

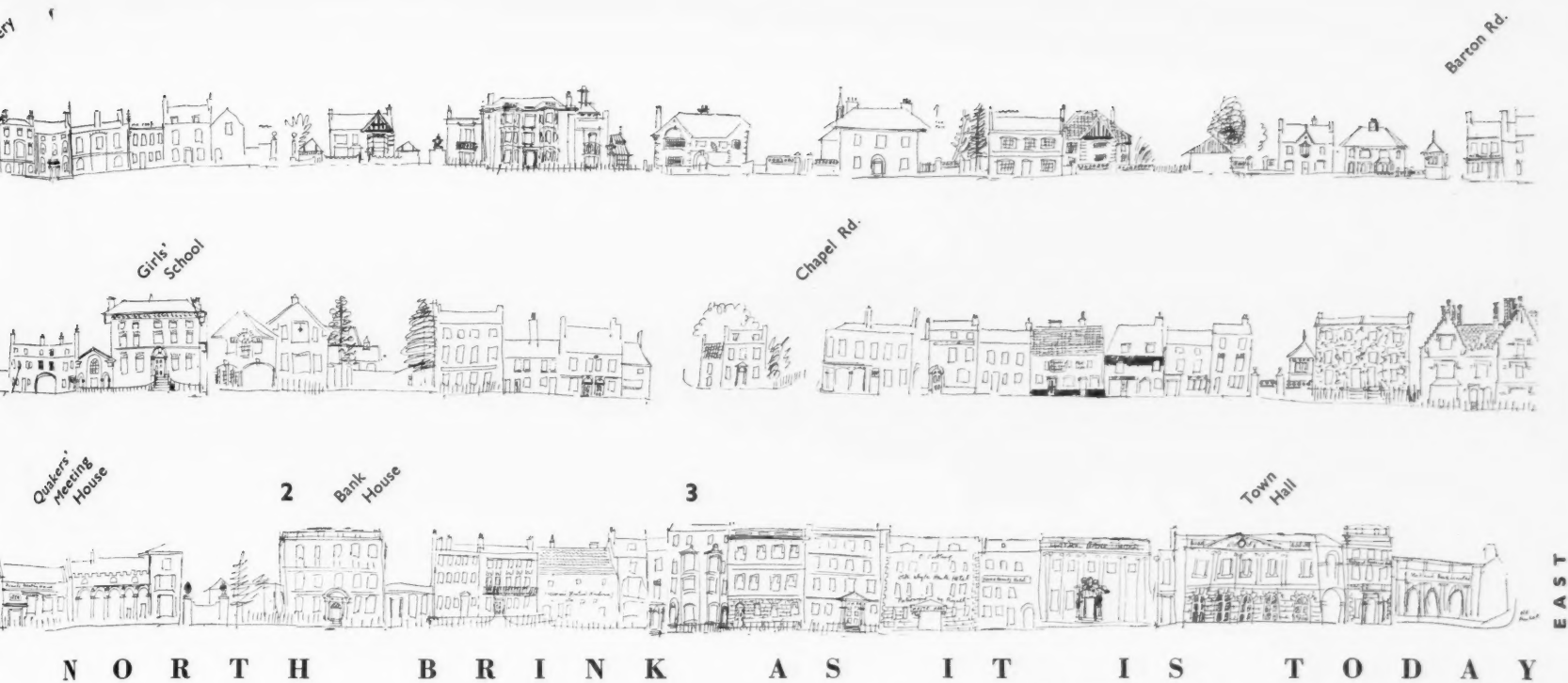
The chief difference between these two scenes (left, about 1860; right, today) is that in the former the riverside is still busy, with barges loading and unloading at the quays and cranes and derricks standing ready to serve them, while in the latter the quays are deserted, as water transport is not as active as it was. Barges do still come up the Nene, but not in such numbers, nor do they trade right into the centre of the town. But the cliff-like terrace of Dutch-style brick warehouses still stands and some of them are still in use as granaries. They give the centre of Wisbech much of its character as a compact river port.



B R E W E R Y

Also along the quays are several fine brick breweries dating from the beginning of the nineteenth century. This is the Union Brewery at the end of Nene Quay, photographed about 1860, left, and today, right (see also Plate iii). The present-day view is taken from further away to show the modern timber embankment in contrast to the shelving shore in the old view with its casual assortment of mooring-posts and slipways. The several good industrial buildings of this type are just as much worth preserving as the elegant Georgian houses in which Wisbech is also rich.





[continued from page 237]

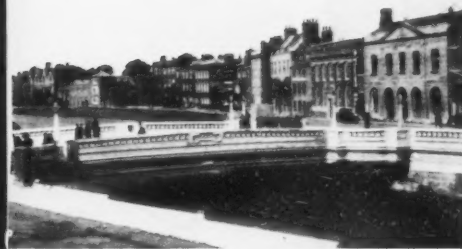
row of three-storey houses with effectively modelled brick fronts, rather reminiscent in its proportions of Hammersmith Terrace, London—the end of this row is shown in 4—the boys' Grammar School, a square stone building with a sturdy front and a glazed cupola, 6, but with an unfortunate late nineteenth-century addition in dark red brick, and a very charming group of buildings at the town end of the Brink now inhabited by the police. The care of the Police Station and cupola-ed Sessions House, 5, is a heavy responsibility, as they occupy a key position, facing the bridge-head, across the river from the Town Hall.

The two Brinks fortunately survive with most of their buildings and all their vivid character intact. Without prejudicing any necessary development—for they serve as useful a purpose now as when they were built—they may be recorded as suitable subjects for careful preservation. Turning to face the centre of the town we find that it has retained its character as a busy port and market centre with varying degrees of success. The bridge is still naturally the town's focal point. It has changed several times since the eighteenth century, not always for the better. The Butter Market has been pulled down. Now on the same site Thomas Clarkson—the anti-slavery agitator and Wordsworth's "firm friend of human kind"—surveys the bridge and the Nene quays from the elevation of his "obstinate hill"* in the shape of a Gilbert Scott style monument, and what has been lost in consistency of architectural character

* See Wordsworth's sonnet on the passing of the Anti-Slavery Bill.



**TOWN HALL AND
NORTH BRINK**



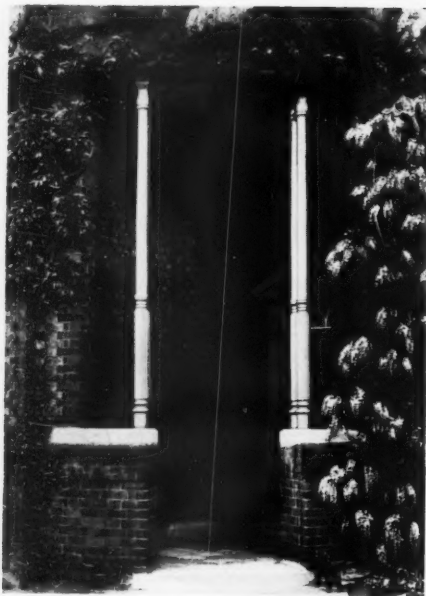
Looking along the North Brink from the bridge-head: left, in 1853; right, today. The latter view is taken from a little further away and shows the bridge in the foreground. On the right of each view is the Town Hall or Corn Exchange. Beside the Town Hall is now a neo-Georgian bank; otherwise the terrace of houses along the Brink is quite unchanged. Again the cobbled surface of an eighteenth century quay has given way to modern tar-macadam.



**NORTH BRINK
WEST**



Further down the North Brink: left, in 1859; right, today. On the right of each view is the row of gabled gothic houses that gives so much character to this part of the Brink. They can also be seen on the extreme left in the view looking down the Brink above, but they must only just have been built when it was taken.



2



3

GEORGIAN ARCHITECTURE ON THE NORTH BRINK

1, *Elgood's Brewery at the extreme western end of the North Brink. A typical piece of early nineteenth century industrial architecture in brick, it is still in use. The archway with its smartly painted quoins and neat lettering round the crown leads through to a courtyard behind.* 2, *the porch entrance to one of the side pavilions at Bank House. The house itself (see Plate ii) was built in 1722, but the two pavilions were added probably not long before the middle of the nineteenth century. They are elegantly detailed and both have this quite unusual porch with coupled columns of a faintly oriental flavour.* 3, *typical late Georgian bay-windowed houses: the centre portion of the terrace of tall merchants' houses occupying the space between Bank House and the Town Hall.*

and completeness of civic equipment has been gained in space.

From the other side of the open space surrounding the Clarkson monument a short street leads up to the Crescent, another piece of the town where the Georgian architecture survives nearly intact. With the two Brinks it forms a remarkable sequence of careful eighteenth century planned development: a model of how good planning can be carried out on the framework of an earlier order. The very limitations of such a framework indeed produce a character that the blank canvas demanded by the modern Utopian planner will take years to acquire. It is built on the site of the old castle. The latter disappeared many centuries ago, for a subsequent occupant of the site was a large mansion, a palace of the Bishops of Ely, attributed without much reason to Inigo Jones, but more likely the work of Bell of King's Lynn. This was pulled down in

1818. Now two crescents, 7 and 8, of delightful demure late Georgian houses face each other across an intervening garden to form a circus. One is known simply as the Crescent, the other as Ely Place. Half the oval garden in the middle is open to view behind iron railings, and the other half serves as private garden to a Regency villa, 10, built on the actual site of the Bishop's Palace and retaining the latter's stone gateway as its own rather disproportionate entrance. This villa faces the north end of the circus, which opens out not into a through street but into a small dignified square bounded on the far side by railings and a flight of steps leading down to the precincts of the parish church. The two built-up sides of the square are occupied by Georgian houses and by the Greek Revival façade of the Wisbech Museum. The whole forms a well-articulated town-planning system, secluded yet logically linked at one end with the bridge-head and the

Brinks, at the other with the church, and on the cross-axis—by a narrow street bisecting the curve of Ely Place—with the Market Place; intelligibly relating the diverse elements of the town as good town-planning should. It is a piece of civic design that any town would be proud to possess, as one hopes that Exeter is proud of Southernhay, Chichester of the Pallants or Bridgwater of Bridge Street, with all of which the group comprising Ely Place, the Crescent and Museum Square at Wisbech have something in common. The curve of Ely Place unfortunately is broken by a ruthless piece of vandalism perpetrated about fifty years ago, when about half-a-dozen of the houses were pulled down to make way for a Baptist Chapel in a dead imitation Gothic style, but the effect of the whole survives sufficiently to make it another suitable subject for careful preservation. Again sentiment and

[continued on page 241]

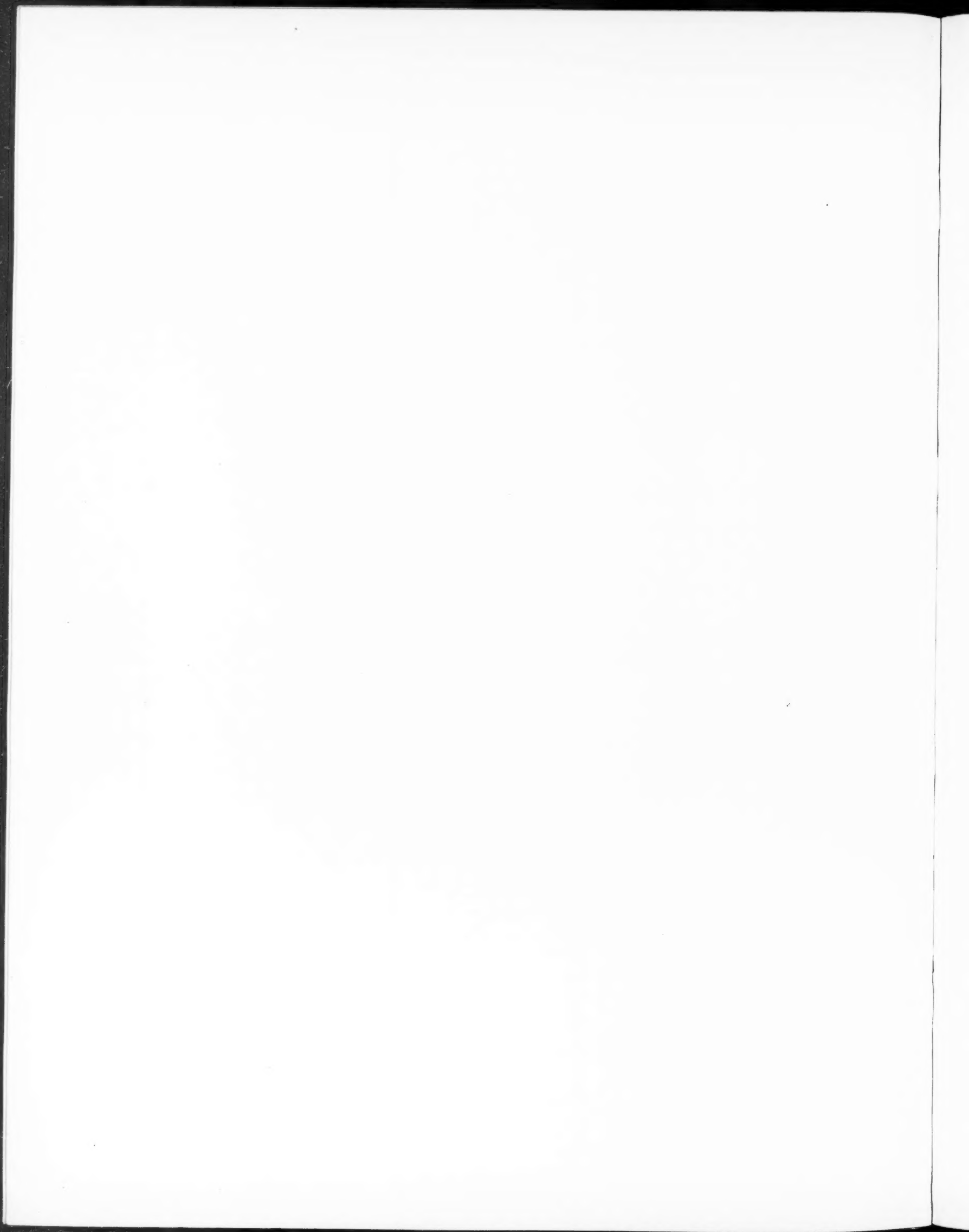


Two doorways in Wisbech, in different styles of the early nineteenth century. That on the left belongs to the Octagon Chapel in the Old Market, a remarkable Gothic Revival building in pale yellow brick, a home of the staunch Protestantism that has given East Anglia so much of its character. That on the right is typical of the late Georgian domestic work found throughout the town. It belongs to Ely Place, where the same refined and delicate pattern with its reeded columns is repeated along a whole crescent.

PLATE iv

December 1939







Bank House, on the North Brink, the most important Georgian house in Wisbech and once the residence of the Lords Lieutenant of Cambridgeshire, was itself built in 1722, but about the middle of the century it was altered inside and provided with a quantity of magnificent carving. This is thought to have been executed by a French craftsman who had been working at Houghton Hall. Above is the drawing-room mantel-piece. It is in Weimar pine, painted.

PLATE v

December 1939





T H E S O U T H B R I N K

4, a portion of one of the Georgian terraces on the South Brink, near the west end (see drawing above) with a delicately modelled stable archway. 5, the eastern end of the South Brink, opposite the bridge-head, showing the group of buildings now occupied by the police, forming the corner of South Brink Place. On the left is the Sessions Court with an elegant glass cupola. Beside it is the Police Station, a three-storeyed house with its square sash windows set in arched recesses. Further along the Brink, a little set back from the road, is the Grammar School, 6, a square building in pale yellow brick with a sturdy stone doorway and a white-painted cupola. It has an unfortunate addition in hard shiny brick of a dark red colour.



4



5



6

[continued from page 240]

beauty are on the side of use, for a quiet residential quarter in a busy market town is an anything but obsolete need.

The side exit from this quarter, as already described, leads straight to the Market Place, which in turn is connected directly with the bridge-head by the short High Street. Where the two join is the Rose and Crown Hotel, a model of what the principal inn of a market town should be. The Market Place is a neatly rectangular place, very evidently still the commercial centre of the town; but to reach the spiritual centre we must look behind the Market Place—both figuratively and actually—at the great warehouses that line the river and give the market town its significance as a river port. These warehouses form an imposing cliff looking down the river from the bridge. One side they drop sheer to the water with cavernous archways leading into their interiors. On the other side a cobbled quay against which ships could moor passes the foot of another tall warehouse and along the flank of another of those spectacular breweries. This stretch of the river contains the essence

of Wisbech, where its character is most clearly portrayed in the curve of river, the mud banks where old rotting posts are visible at low tide, the barges moored beneath the cobbled quays, the humble shops and public houses overshadowed by the tall brick warehouses—overshadowed, but not cowed by them, as the slum cottages are cowed by the slag heaps and blast furnaces of the black

country; for it is part of the character of this place that it represents a balanced community.

The foregoing is a brief catalogue of the architectural glories of Wisbech, omitting only the many good Georgian houses which the town, like most towns of its kind, possesses, apart from the planned terraces and crescents described, and omitting also one other unique



W I S B E C H
B R I D G E

The bridge has been twice replaced during the past century. The two photographs on the left were taken in 1853 and 1858 respectively. The first shows the charming eighteenth century stone bridge (built, 1758; demolished 1855) which must have blended well with the stone-faced Town Hall close by. The second shows the very uncompromising engineer's iron bridge (built 1857; demolished 1931) with the odd toll-house structure at one end. The latter was followed by the present bridge, right, unfortunately of rather vulgar design, the least distinguished piece of architecture in Wisbech.



7



8



9



10

THE CRESCENT

7, looking along the Crescent which, with the corresponding crescent-shaped Ely Place, 8, forms a circus surrounding the site of the old castle and later of a palace of the Bishops of Ely. This site is now partly occupied by a Regency villa, 10, which stands behind the original stone gateway of the palace. This view is taken from Museum Square which opens out of one end of the Crescent and with it forms an admirable piece of Georgian town-planning, intelligently linking up the focal centres of the town. In this secluded residential quarter the Georgian architecture survives almost intact, although Ely Place has been broken into to make room for a Baptist Church, 9. In 8, taken from the front of the church, it can be seen how the terrace of houses has been ruthlessly sliced through. A detail of the doorway of one of these houses is given on Plate iv.

building, the Octagon Chapel in the Old Market on the north side of the river; an ambitious building in Georgian Gothic Revival style (see figure 11 and Plate v), in yellow brick with stone trimmings, full of the solid character that means so much in East Anglia. And in mentioning this character we must remind ourselves that a catalogue of monuments was not what we set out to give; rather to interpret them as representing a personality.

To define that personality we must bear in mind the countryside out of which this East Anglian town life grew. That gives us one clue to the brave sweep of skyline and foreground we find along the Brinks: the fen landscape with its clean peaty air, its black soil full of wealth for the farmer and yet full of the constant threat of inundation; so that the rich indolence we know in the Suffolk or Devon landscape gives way to watchfulness; men have to struggle to keep the upper hand. The absence of fuss and flourish in the architecture, the simple masses of brickwork rising from the quaysides, even the trimness of the painted wooden railings between the Brinks and the river, are typical illustrations of the forthrightness thus engendered. It has much in common with nautical architecture, because that is also an expression of effort and watchfulness.

And we must also look for the source of that culture that enabled the successful farmers, merchants, brewers and provincial gentlemen

to build on a fundamentally commercial framework a community with mature sophisticated taste. It would need a history of eighteenth-century civilization as it manifested itself in East Anglia to explain it fully, but some indication may be found in the unity already mentioned, that allowed each element in the local life its due proportion of emphasis and expression, producing a microcosm of the balanced community. Another factor that comes into the picture is the strong protestant and, later, nonconformist tradition of East Anglia that not only found appropriate expression in the civic worth, the matter-of-factness, of Georgian building, but resulted more indirectly in a localization of culture. Until as late as 1871 dissenters were not allowed to enter the English universities, so enterprising towns that had a strong nonconformist tradition perforce became culturally more self-contained, being driven back on themselves by this and similar restrictions; or at least they did not suffer the withdrawal of their most cultivated elements.

The term "provincial" only becomes a term of disparagement when some such withdrawal as this results in contentment with second-rate standards and a loss of enterprise. But a provincial town may for many reasons succeed in maintaining the best standards of its time, the most progressive planning (within the limits of its resources) and a native culture, leaving a vivid embodiment of them to posterity.



11, the Octagon Chapel, facing across the Old Market towards the bridge, is another remarkable early nineteenth century building. It is in yellow brick with its Gothic Revival windows, pinnacles and pierced parapet in stone. A detail of its door is given on Plate iv.

THE OCTAGON CHAPEL

CURRENT
ARCHITECTURE



VILLAS 1 FIGINI AND PELLINI

This villa for an artist near Milan is planned on three sides of a square. A high wall encloses the house and part of the garden. A large living-room occupies the whole of one wing and it is subdivided into dining, living and library quarters and also includes screens on which to hang pictures. In another wing are the service rooms and the studio which overlooks the tree in the enclosed courtyard. The bedroom on the third side also opens on to the courtyard in front of a small bathing pool. The house is of steel frame construction with concrete slab walls rendered in white to contrast with the strong red of the wall.

1, a general view. 2, the courtyard which encloses an existing tree and shrubs. The curved protecting wall is painted orange on the inside and blue-grey on the outside and the floor is of light-ochre colour cement squares.





Situated at Urio on Lake Como this garden terrace overlooks the lake. A wooden staircase leads to a living-room underneath. The trellis window by the staircase is finished a lacquer-red colour and the same colour is repeated in the trellis for climbing plants on the right of the photograph. The roof,

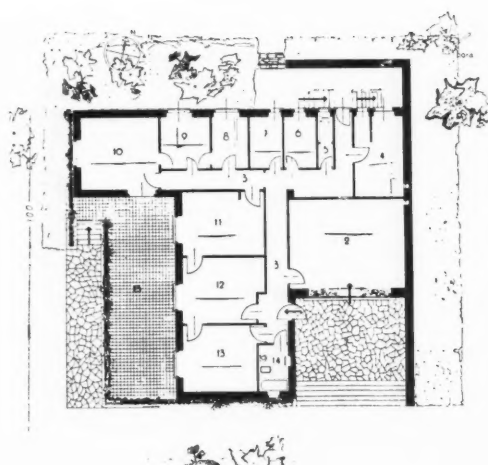
and the iron pillars which support it, are painted white. The grass inside the balustrade is continued in between the irregular shapes of the white marble terrace. Glass doors open on to the terrace from the stairs.

VILLAS 2 FRANCO ALBINI

This villa is in the Carso district of north Italy where there is a strong prevailing wind. To protect the house a wall of local stone runs the full length on the east side, 2. Bedrooms open on to the terrace, 1, and the living-room opens on to a yard behind the protecting wall. The walls are lime-washed a salmon pink colour.

KEY TO PLAN

- | | |
|---------------------|-----------------|
| 1 Yard. | 8 Kitchen. |
| 2 Living-room. | 9 Office. |
| 3 Store room. | 10 Dining-room. |
| 4 Cloakroom. | 11, 12, 13 Bed- |
| 5 Servants' bath- | rooms. |
| room. | 14 Bathroom. |
| 6, 7 Servants' bed- | 15 Terrace. |
| rooms. | |



VILLAS 3 BANFI, BELGIOSO PERESSUTTI AND ROGERS

2



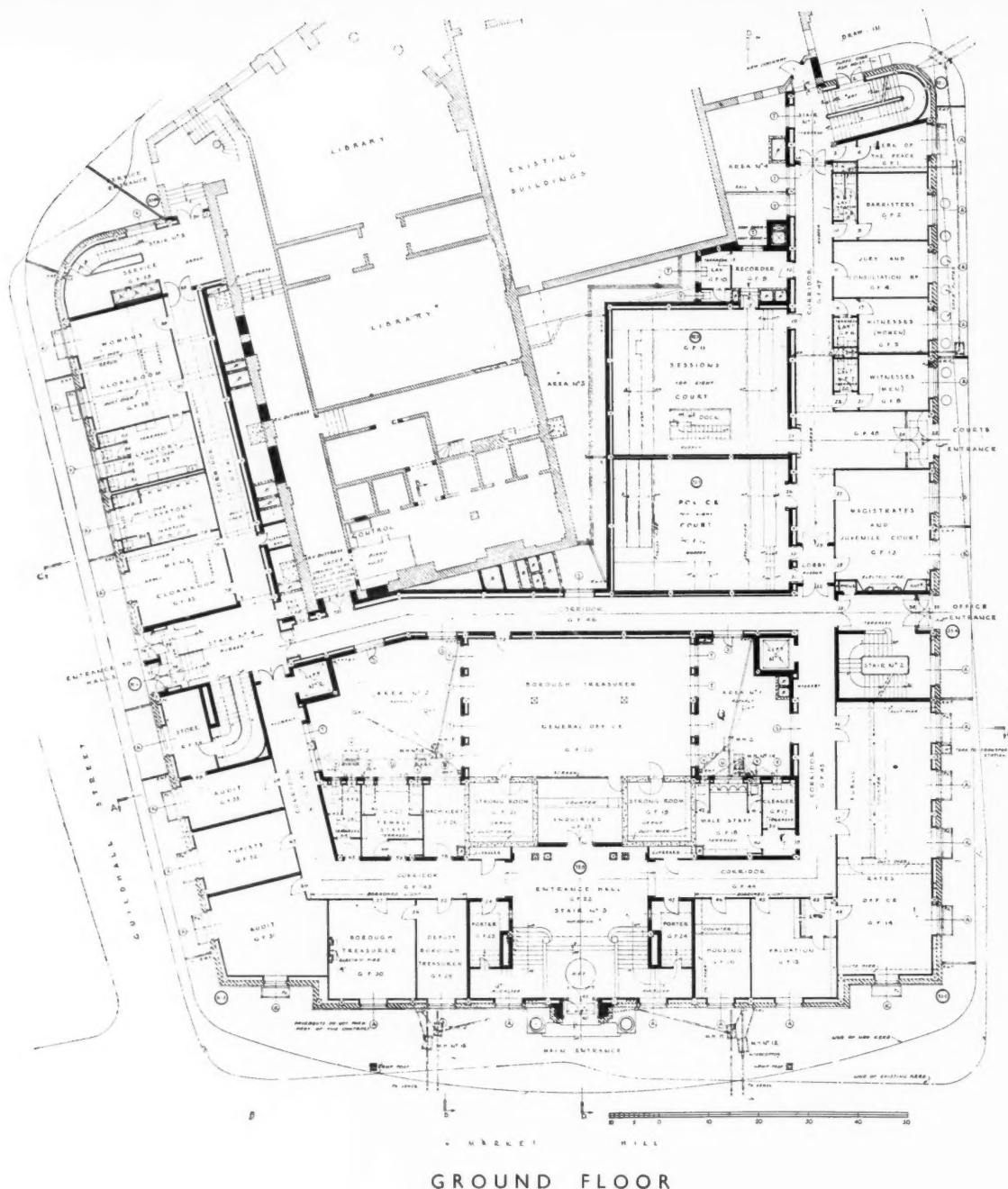
TOWN HALLS 1 C. COWLES-VOYSEY

PLANNING The new Cambridge Guildhall is situated on an island site overlooking Market Hill where the administrative offices of the town have been for several hundred years. Space was severely limited and the scheme provides for the redevelopment of adjacent buildings at a later date, but temporarily the new buildings are linked with part of the old block. The new buildings contain the usual administrative offices, a Council chamber and Council suite and also Police and Sessions courts.

CONSTRUCTION AND MATERIALS The building is of steel frame construction with cavity brick curtain walls. Floors, roofs and staircases are of reinforced concrete, and the basement which is tanked with asphalt is also of reinforced concrete. The foundations needed especial care, as, in places, they are below water level and running sand was encountered.



1, the main entrance. 2, the street elevation overlooking Market Hill.

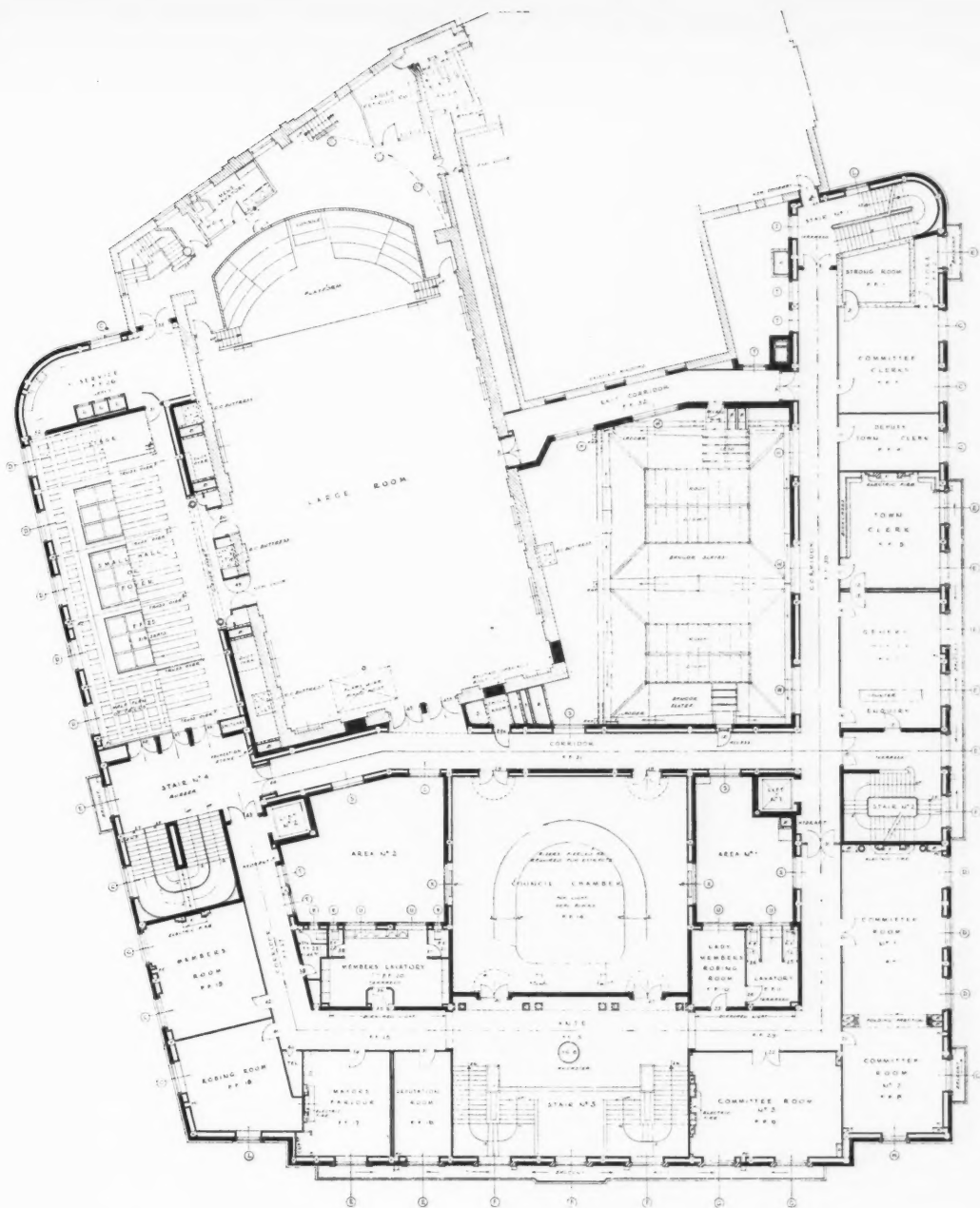


EQUIPMENT AND FINISHES. The ground floor, cornice and window dressings are of Clipsham stone and a Stamford brick of slightly contrasting colour has been used for facing. The entrance doors and casement windows are bronze. Flooring generally is teak block with terrazzo for floors and walls of lavatories and secondary staircases. Walls are plastered with painted dadoes. Ancaster stone linings have been used for the main staircase. The Council chamber is lined with leather and joinery is in oak and walnut in the main rooms. Heating is by low-pressure hot water through ceiling panels with gravity-fed coke fired boilers. Synchronized electric clocks have been installed throughout.

3, the landing at the top of the main staircase outside the Council chamber. 4, the Sessions court. All joinery is in oak.



3



FIRST FLOOR



4



5



6



7



8

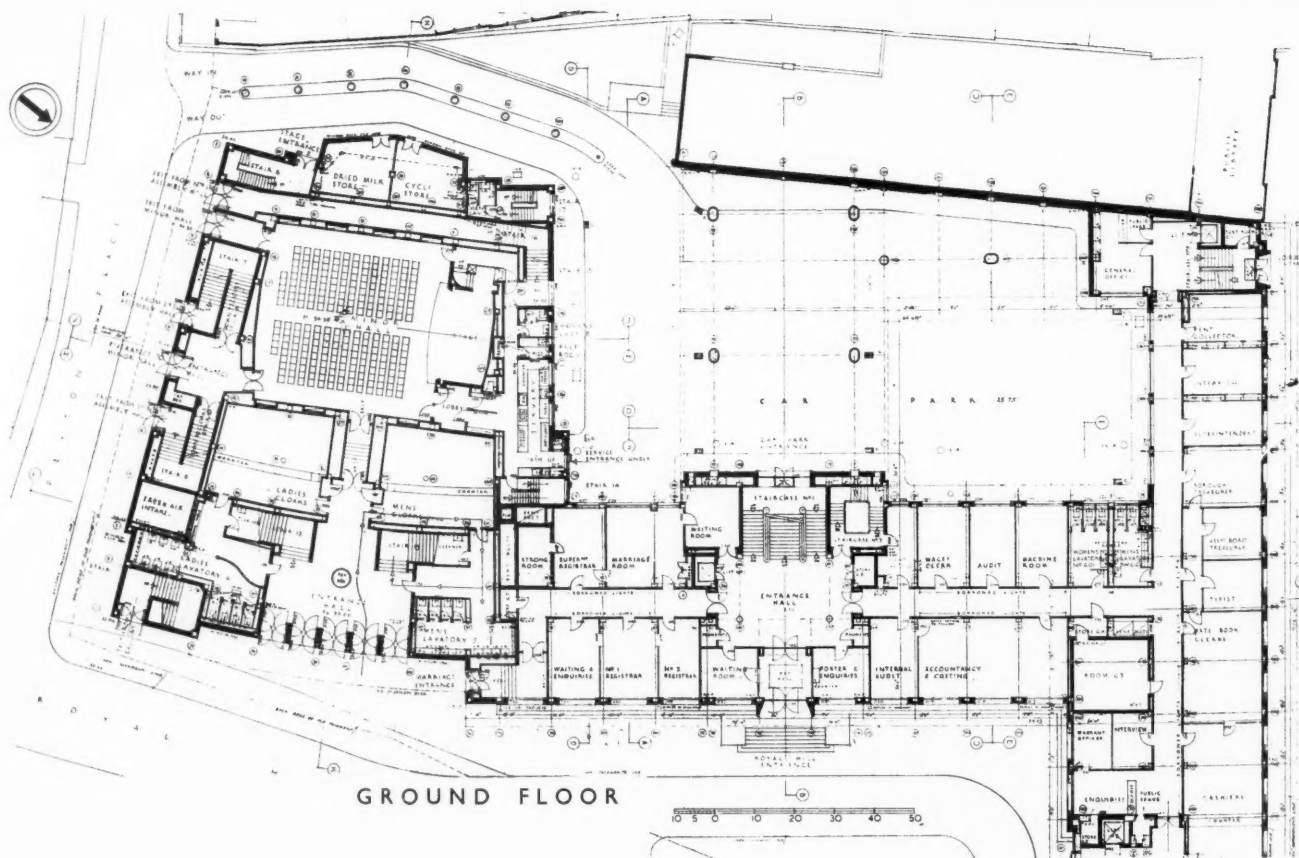
5, the Police court. 6, the Council chamber. The walls are leather-covered and the joinery and fittings are of Australian walnut. 7, the Committee room. The panelling and furniture are of English walnut, which is also used in the Town clerk's room, 8.

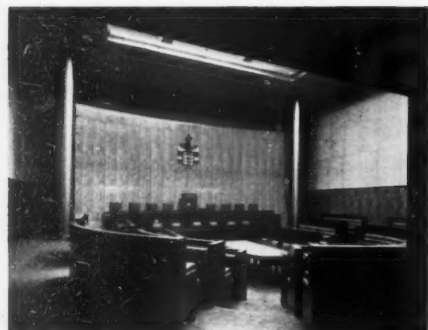
TOWN HALLS 2

CULPIN AND SON

PLANNING The building consists of two main blocks, one consisting of large and small assembly halls, and the other of administrative offices and the council chamber. These are linked by a corridor with committee rooms and the mayor's suite on either side. The large hall on the first floor is used for meetings, dances, and film and theatre shows and seats 773 including the gallery. The small hall has a separate entrance but is linked to the large hall for use as a supper room. Stores and record offices are housed in the basement, and the third floor (of which the plan is not shown) contains a caretaker's flat and staff rooms.

1, a view from the south-east looking towards the entrance with the block containing the large and small halls on the left.

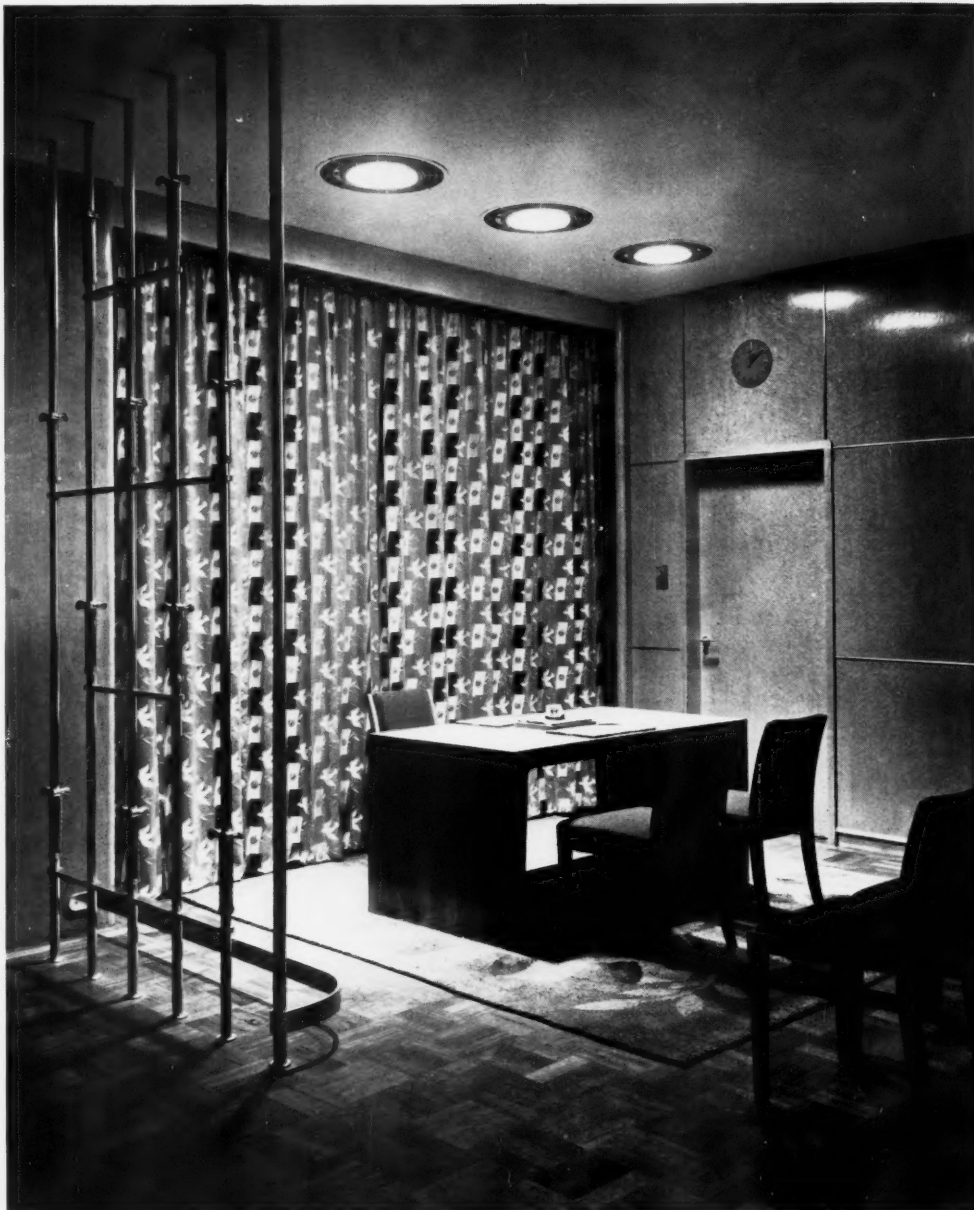




4

EQUIPMENT AND FINISHES All stairs and ground floor corridors are finished in terrazzo; the remaining corridors are of oak blocks. All offices have flush doors, beech block floors and built-in cupboards. The civic entrance hall and principal stairs have travertine walls with moulded vertical joints, the floors are golden travertine and the architraves, column casings, handrailing and doors are manganese bronze. The large hall has a maple floor with a dark brown removable carpet. The walls are covered in a pricked muslin over acoustic felt finished in matt paint and the dado below is Australian walnut. There is an air-conditioning installation and all heating is by ceiling panels.

4, the Council chamber. The structural columns are finished in gilt lacquer. The dado is weathered sycamore, the walls are covered with natural fibre-board V-jointed. The fittings are English walnut and the seats are covered in Indian red morocco. 5, the marriage room. The floor is teak block and the walls are panelled in bird's eye maple with aluminium dividing strips. The silver bronze grille separates the marriage recess from the rest of the room. The curtains are white, lime green and mauve. The furniture is English cherry. 6, the male members' room. The walls are covered in a paper-mounted Australian walnut veneer and the furniture is in Australian walnut with green morocco covering. 7, a staircase landing.



5



6



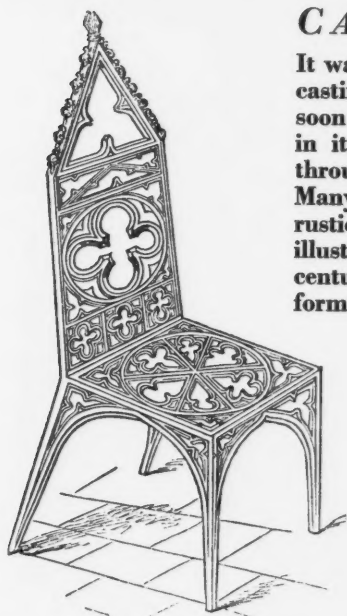
7





CAST IRON GARDEN FURNITURE

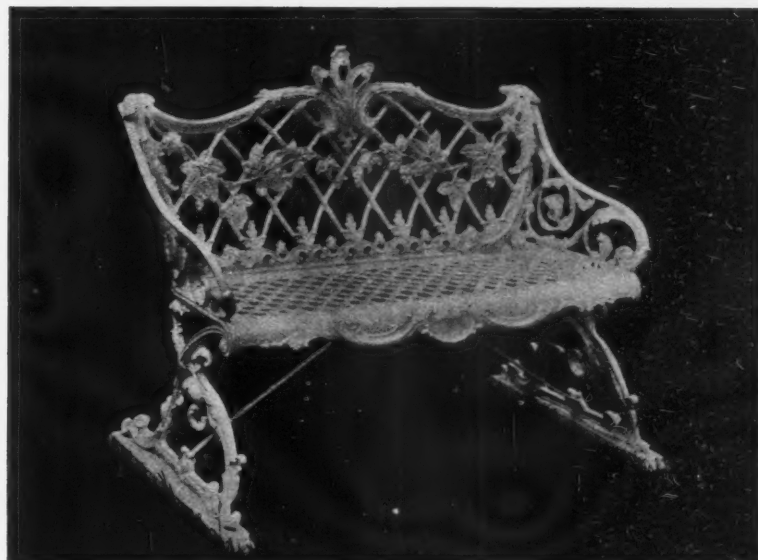
It was not until the end of the eighteenth century that a satisfactory technique for casting iron in any but the simplest shapes was discovered. Its possibilities were soon exploited in fences, balconies and tradesmen's signs but the variety of invention in its use is best shown by the garden chairs and tables which were popular throughout the nineteenth century both on the Continent and in this country. Many designs were no more than a poor imitation of wrought iron work or of the rustic benches of the eighteenth century landscape garden, but as the examples illustrated below and on the next page show, cast iron even at the end of the century displayed lightness and grace which had by then disappeared from the forms of ordinary furniture.



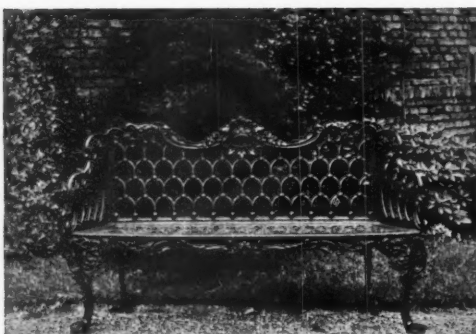
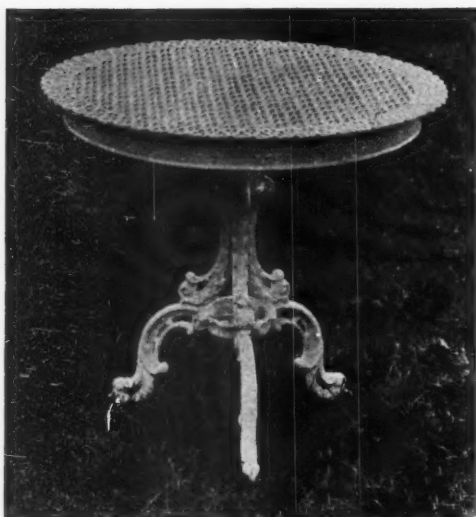
A design for a Gothic chair in cast iron, from Loudon's "Encyclopaedia of Cottage, Farm and Villa Architecture" (1833). To be cast in three pieces, afterwards to be riveted together.



At the time when a Gothic garden seat would have been the delight of an amateur revivalist cast iron technique had not yet been established, consequently this English chair dating from 1830 is a rare example of its kind.



Another English example showing the lightness and grace of cast iron furniture in the latter half of the century. The example dates from 1873 and has the naturalistic plant ornamentation characteristic of the English style.



Some more illustrations of how the possibilities of cast iron were exploited in the nineteenth century. Garden furniture of this kind was usually painted either in white, to contrast with the surroundings, as in the English table at the top dating from 1875, or in shades of dark green or bronze. The two garden seats show typical variations of English design, the latter (which comes from Pains Hill) showing a fern motif from the earlier part of the century. The two illustrations at the bottom show, left, an early German example, strong and simple but no less graceful, and on the right an English table, actually found in Holland.

CAST IRON GARDEN FURNITURE

BOOKS

A Key To A Kingdom

A KEY TO MODERN ARCHITECTURE. By F. R. S. Yorke and Colin T. Penn. London: Blackie and Son. Price 5s. net.

DURING the past few years a number of books have been published on modern architecture, but few of them have been popular, either in price or in content. Most of them have been in the form of information or preachments to the architect and the coterie. Those few that have been popular in intention have tended to be restricted in perspective. The great virtue of this book is that it has historical perspective, both past and future; the key does not merely open the front doors of a few experimental houses in Hampstead and the European capitals. Although the authors may gallop somewhat roughshod from Babylon to Sydenham Hill they give a fairly intelligible explanation on their way in spite of their breathlessness, and the rest of the journey past the shoddy suburbs and the gleaming High-points to the *Ville Radieuse* is more leisurely and, let it be noted, not entirely visionary.

After the historical gallop through changing society and architecture the book has a good section on the revolutionary changes in structure that have taken place since the opening of the nineteenth century. A section on the new æsthetic follows, arguing from the plan and its needs, and the impact of new materials: "... when we plan and construct according to our needs, with freedom and economy, the accepted traditional sense of dimension, proportion, and scale is destroyed." Our "needs" rather beg the question, but there is no space to discuss that here. The book ends with a chapter on future possibilities, dealing with mass-production and the wider aspects of constructive town-planning which are inseparable from the modern architect's philosophy. Sensibly not fighting shy of the political implications which this outlook involves it states, in short: This is what you could have, and it could transform your lives; these are some of the obstacles, but they are worth overcoming.

It is essential that such views as these should be put before the public in every possible way. The fallacy of some architects who have social consciences seems to be that although they are eager to persuade others that a socialized Britain would open up vast possibilities for the whole population, and are adamant that the public is ill-informed on this point, they are curiously blind to the situation that the public is equally ill-informed on the question of architecture, and that it is utterly oblivious of the great advantages that modern technique and architectural thought could provide in the whole of our physical environment if it had the social opportunity. Modern architecture, its technics and theory, from the individual family shelter to the town and its relationship to country, is a vital branch of social knowledge; that knowledge must reach the people towards whose happiness and well being it is directed. "If our immense technical achievements are ever to be applied to the advancement of the happiness of the whole of humanity, and not to the private gain of a small section of it, then the nature and possibilities of modern architecture must be widely understood." So say Messrs. Yorke and Penn. Power to their elbows. The fight is on two fronts, inside the profession and inside the Englishman's castle, and it is the latter front that particularly needs developing. It is a fully constructive fight, and the promise of a three years' European war does not lessen by one iota the need for carrying it on.

ANTHONY COX

A Planned Water System

ENGLAND'S WATER PROBLEM. By H. Spence-Sales and John Bland. London: Country Life. Price 8s. 6d. net.

TOWNPLANNING is associated in the public mind with urban and regional planning problems. This attitude unfortunately is not only restricted to the public. Almost all the proposals of contemporary planners have been coloured by an urban outlook, from schemes as widely divergent as Le Corbusier's "Ferme Radieuse" and "Village Co-operatif," to our own regional and zoning plans. It is of particular significance, therefore, when townplanners undertake a survey and analysis of a problem of importance to the whole of national planning. In their survey of England's water problem the authors of this book are biased towards the rural solution, and have taken as the subject of their survey the factors necessary for a good water supply for agricultural, industrial and domestic purposes. It is a commonplace to find that most of the information required on which constructive planning proposals can be based is widely dispersed under local and regional bodies and is generally quite incomplete from a national point of view. Water supply is no exception to the rule. The list of commissions, committees and various bodies who have been concerned in trying to establish some form of ordered knowledge of the position is legion.

The attitude of local authorities to each other is typical of the difficulties to be faced. Public utilities such as water, gas and sewage are becoming complex organizations. The capital expenditure required to run them is quickly rising as standards of efficiency improve. In this situation it becomes progressively more difficult for large rural authorities with widely dispersed and poor populations to deal adequately with the services required. The only solution is an arrangement with the urban authority to extend their public utilities to include the rural area.

The slow breakup of the traditional landlord system, which under present legislation can only increase, is an even greater difficulty. Whatever can be said for the political necessity of these laws, and there are strong arguments in their favour, it is only now being realized, that by the adoption of purely negative legislation, grave drawbacks are incurred. It is impossible today for the responsible landowner properly to fulfil his task of maintaining the welfare of his land and tenants. As farming in its struggle to maintain living standards adopts more scientific measures, it also becomes increasingly dependant on water supply piped to all parts of the farm. The widespread adoption of "turn about" farming, where it is absolutely necessary to have a supply in each field, the enormous amount of water required for milk cooling, compulsory under the Milk Marketing Board's scheme, and the breeding of fat stock, are all examples of expenditure for water supply which must be undertaken if farming is to survive.

It is interesting to note that in the authors' opinion the necessity of planning water mains along arterial roads has largely encouraged ribbon development. The whole of the legislation which in the first place permits the use of such building sites is of course responsible, but there is no doubt that this has been a contributory factor.

In conclusion it must be remarked that many of the illustrations hardly add to the thoroughness with which this whole survey has been undertaken. They seem quite unnecessary, except as pictures. It is a pity, too, that no maps have been included, as they would have helped to clarify much of the statistical data. An acknowledgment is made to *Country Life* for constant guidance and encouragement. We can only hope that similar intelligent sponsoring will be given, when conditions permit, to other equally important problems of national planning.

LEO DESYLLAS

WALLPAPER

Its Design and Use in
the Modern Interior

By F. J. Harris

Unlike most of the materials which have been previously dealt with in this series of supplements, wallpaper has not the same interest as a substance nor is it susceptible to much technical innovation. It is therefore with its design and with its proper use in the modern interior that this supplement deals. Other materials of a similar character which are also applied by pasting to the wall surface are mentioned at the end of the supplement.

Historical Note

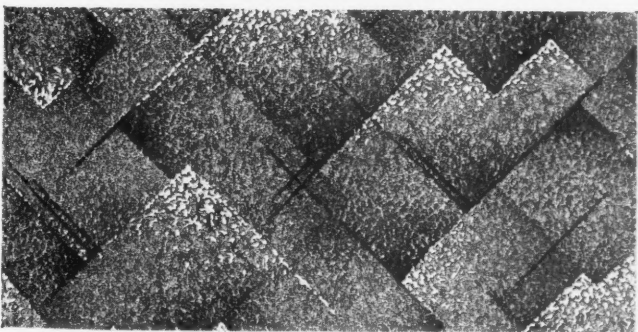
Wallpaper has been in constant use as a wall covering since the fifteenth century at which time it was hand-painted and served as a substitute for the richer and more costly tapestry hangings of the nobility, and it was not until its vogue in the later eighteenth century that it ceased to be regarded as a substitute material. Since this time the cheapness of machine production has maintained its pre-eminence. John Gregory Grace, one of the earliest historians of wallpaper, in a lecture at the R.I.B.A. in 1839 divides wallpapers produced before the eighteenth century into three types "the Flock, the Metal, and the Coloured, and each of these seems to have been invented at a different time as an imitation of a distinct material. The Flock (called by the French originally, *Tonture de laine*) to imitate the tapestries and figured velvets, the Metal in imitation of the gilt leather, and the coloured as a cheap substitute for painted decorations."

Block-printing was the general method of manufacture current towards the end of the seventeenth century; although stencilling was used it remained a less popular method and almost died out towards the end of the eighteenth century. Papers were usually printed in sheets of about three-quarters of a yard long (the present standard size is 12 yards by 21 inches) which were joined to form a roll 12 yards in length, but this method was unsatisfactory as the joins were always visible and often peeled away.

As an industry wallpaper in the seventeenth and eighteenth centuries was predominantly French, consequently designs produced in England during this period are almost wholly French in character.

The industry gradually developed during the seventeenth century, there

being strong rivalry between English and French producers. In 1688 Jean Papillon first began large-scale production in France and he was followed in England by his son's pupil John Baptist Jackson who established a factory in Battersea in 1746. He claimed to have made many technical improvements in block-printing methods and asserted that his papers had "none of the gay glaring colours in patches of red, green, yellow and blue, etc., which are to pass for flowers and other objects in the common papers—nor are their Lions leaping from Bough to Bough like Cats; Houses in the Air; Clouds and Sky upon the ground—a thorough confusion of all the elements; nor Men and Women with every other animal turned Monsters (like the figures in the Chinese paper) ever to be seen in this work. Persons who would prefer the gaudy and unmeaning Papers (so generally met with) to those done by the inventor of this, would prefer a Fan to a picture of Raphael." A sufficient testimony to the variety of design which prevailed. The vogue for Chinese wallpapers began at the time of Queen Anne and continued throughout the century, nor has its influence ever left the wallpaper trade. The work of the brothers Eckhardt, who established a factory in Chelsea towards the end of the century, represented the best taste of the time: delicate floral patterns with hand-painted additions, and landscape scenes similar in character to French rococo work. Panelling was introduced about this time, an interesting example being a border consisting of a series of sketches by Rowlandson each with a separate caption. These were published in a portfolio by Ackermann under the title "Grotesque borders for Screens, Billiard Rooms, Dressing Rooms, etc. Forming a caricature assemblage of Oddities, Whimsicalities,



Although the most popular wallpapers in the eighteenth century were pictorial, the all-over pattern type was produced by leading English manufacturers. The examples at the top, typical of the work of Eckhardt and Sherringham show the extent of French influence. Centre, a simple naturalistic pattern designed by William Morris, in reaction from the heavy florid patterns of the later nineteenth century. Bottom, a modern "futurist" example, still the most common product of the present-day manufacturer. The example used as a title piece, a design by Edward Bawden, represents the best modern type of all-over pattern.

ALL-OVER PATTERNS

and Extravaganzas. With appropriate labels to the Principal Figures."

As designs became more intricate the number of blocks used increased in number to as many as a thousand for landscape scenes such as those in the Carlhian collection exhibited in London a few years ago.

It was in the thirties that machine printing was first introduced, Charles Potter's successful adaptation of the existing roller printing methods used for calico resulting in his establishment of a factory at Darwen, Lancashire. From then onwards the industry rapidly

developed and its standard of design was always a faithful reflection of Victorian middle-class taste, from the trellises, ivies, spots and diapers of the early period to the heavy floral patterns, often in black and red colourings, which lined the staircases of the well-to-do at the end of the century. In 1861 William Morris founded the firm which still bears his name and Philip Webb, Crane and Voysey followed his inspiration in designing wallpapers; but, while in some spheres his ideas were taken up and developed, his wallpaper designs were merely assimilated without any advance

being made. One might say that socially at least wallpaper has been on the down-grade ever since the eighteenth century, for its present character in design, partly a legacy of the worst Victorian standards and partly an adoption of misunderstood "cubism," rarely rises above the vulgarity of suburbia. There are many reasons why the standard of design has fallen noticeably behind that of other components of the interior, but now that modern architecture has outgrown its early purist phase and is developing greater flexibility the conditions are ripe for a timely renaissance.

Manufacture

The manufacture of wallpapers follows very closely that of printed fabrics, the two main divisions being hand-block printing and machine roller printing. There are, however, various papers on the market such as oatmeal or "ingrain" papers which are sold as they are produced by the paper mill, being merely reeled off by the supplier. These papers, mostly available in neutral shades, are probably the cheapest form of wall-covering providing a pleasant background. A recent development of the same type of paper consists of wood chippings introduced between two layers of paper, which gives a texture similar to a rough plaster. In addition to the methods described below, stencilling is a process used a good deal in making borders and decorative motifs, but its use in the production of actual wallpapers is very small.

Block-Printing

This is the oldest method of wallpaper printing as indeed it is the earliest method of printing in any form. It is, of course, an expensive method, but has the advantage over roller printing that the small initial outlay enables more experimental designs to be produced and (as in the case with furnishing fabrics) any lead towards a new standard of design seems likely for this reason to originate with this method of production. A much greater density of colour is obtainable and the slight irregularities of texture which accompanies all handwork are usually an added attraction. In addition, a small quantity in special colourings can be printed without much extra expense. The surface of the block, usually 22-26 inches long, is made of sycamore or other hardwoods, rubber, lino or metal according to the delicacy of the pattern and the type of paper on which it is to be printed. It is interesting to note that some blocks cut in the early eighteenth century are still in current use. It is important not to dismiss, as some might, this method of production as arty-crafty, for although this is in part true, as has been pointed out above in its possibilities for cheap experiment lies some hope of a new approach to design.

Roller Printing

Accurate engraving is necessary for producing rollers which must register exactly in a pattern in which a dozen or more may be used. Consequently the initial outlay on a new pattern including overheads may be as much as £150 and this, quite as much as the fact that most manufacturers are out of touch with contemporary taste, is a serious stumbling block in the way of better designs involving commercial risk.

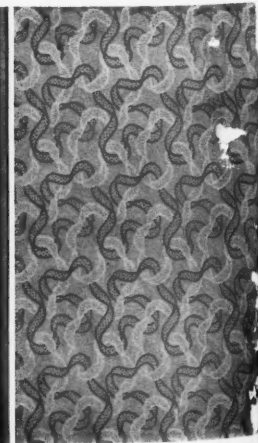
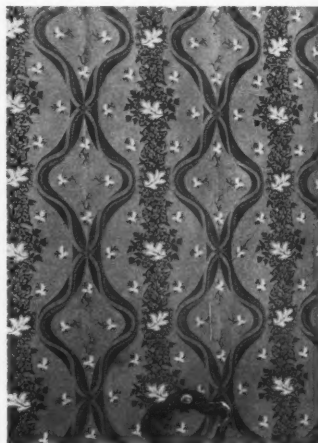
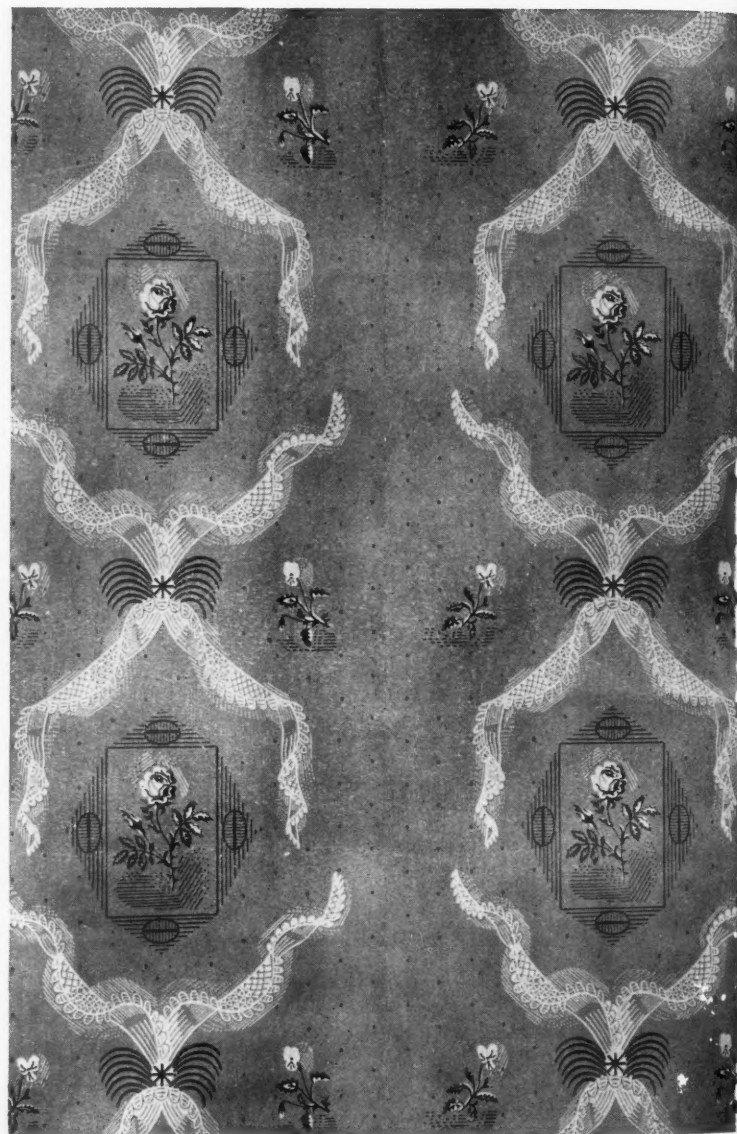
Technical advances in recent years have enabled an increase to be made in the number of rollers used in the same machine (sometimes as many as twenty) and new methods of drying allow the pattern to be run through receiving each impression in quick succession. An unfortunate vogue for blurred effects (whether a genuine public taste or not it is difficult to estimate) is satisfied by running through each successive roller with the previous colours still wet. After running through the colour rollers the reel is then embossed, except in the very cheapest quality papers which are too thin to take an impression. This embossing, added in many cases in a well-meant attempt to imitate a tapestry hanging, often spoils an otherwise pleasant pattern.

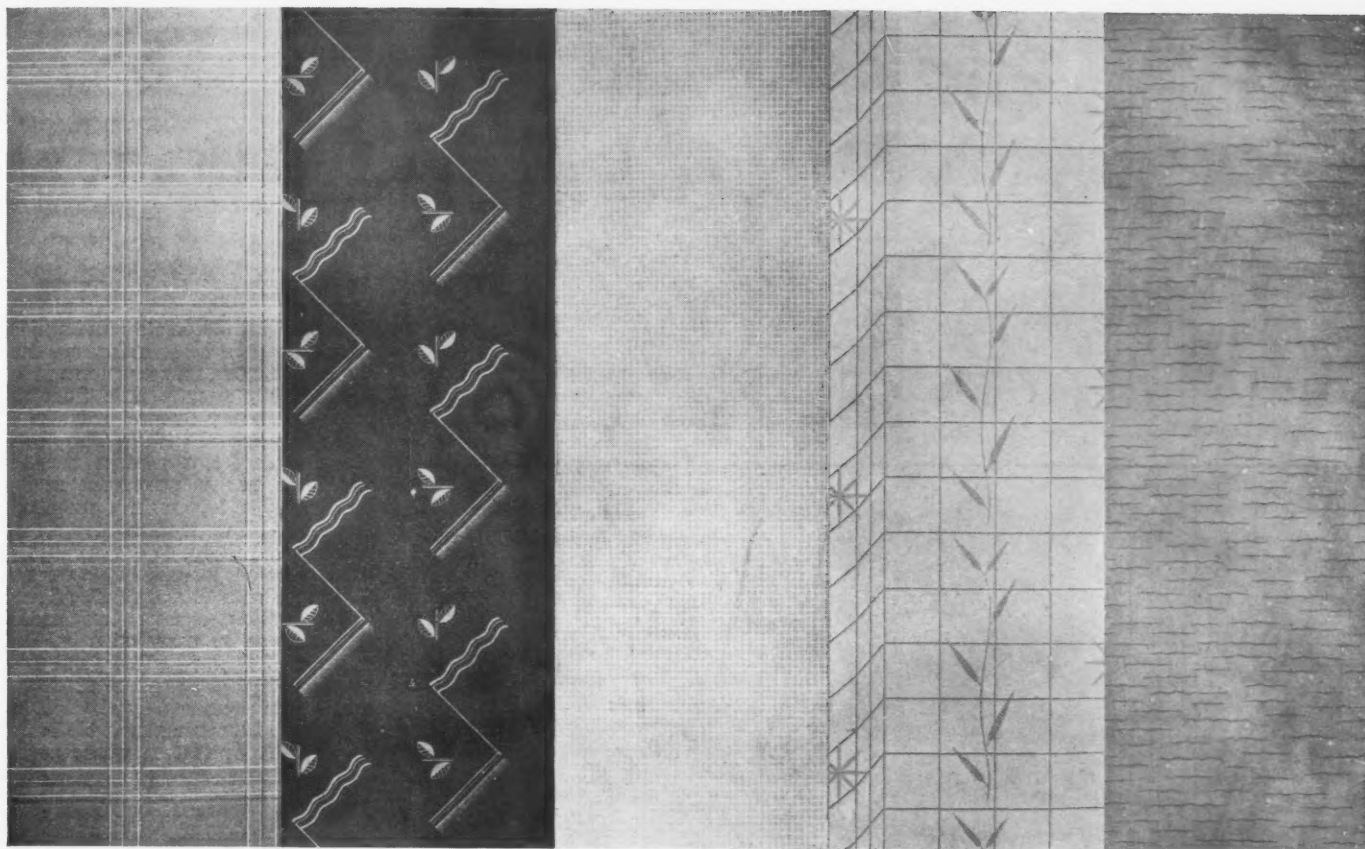
Plain Papers

Papers with absolutely plain surfaces are obtainable but not many are manufactured as they are difficult to hang without showing the joints, fading is more noticeable, and exact colour matching of quantities produced at different times requires the closest attention.

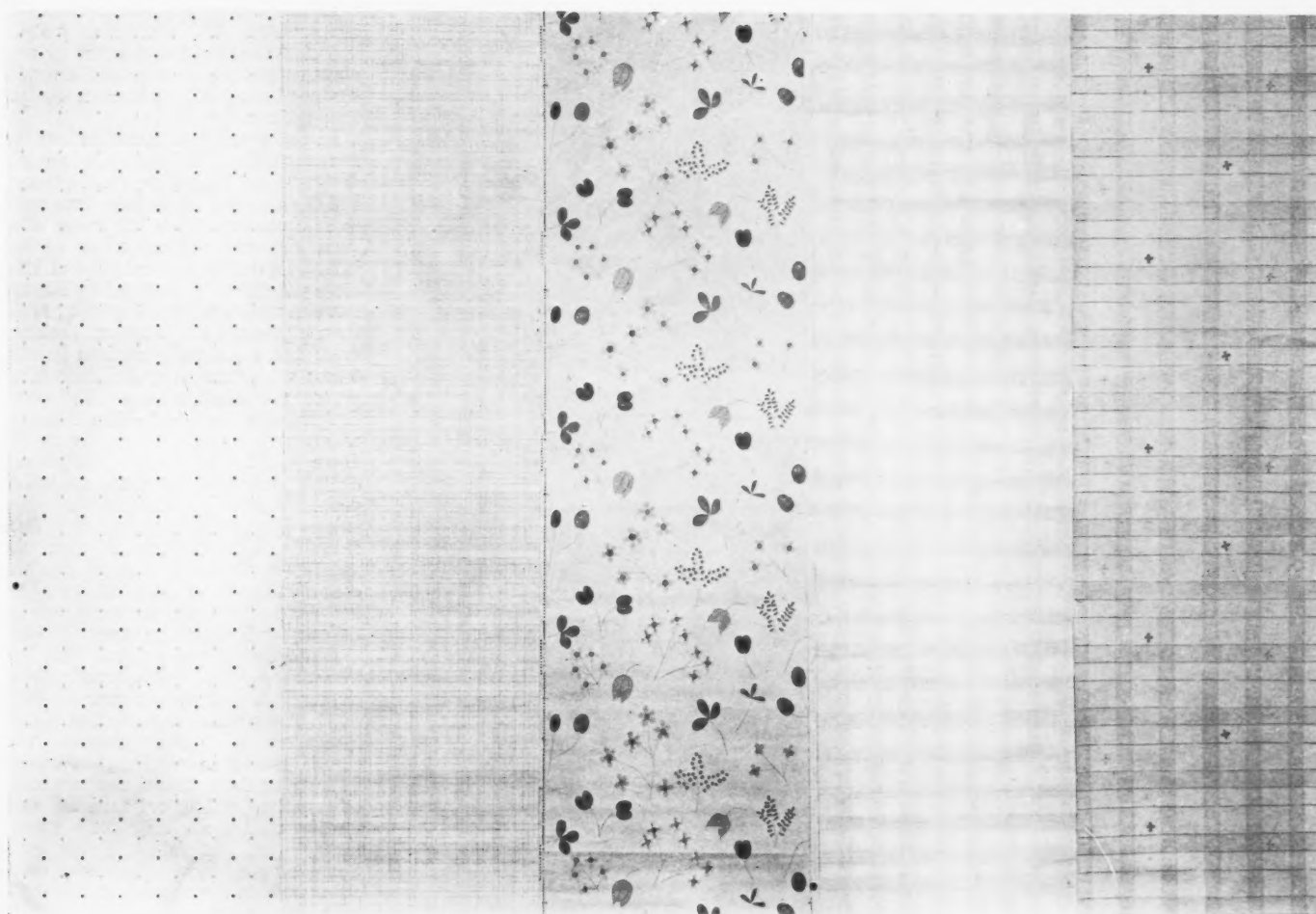
Embossing rollers are not often made in the wallpaper factory and are mostly imported from Germany from which country some of the designs originate, others being produced to order. A considerable variety of texture can be obtained by adding colour which is impressed simultaneously with the embossing roller, sometimes with an underlying print. For heavier papers an additional backing is used which is stuck to the original at the same time as it is embossed.

A recent development in plain papers is the use of a heavy impasto of colour to give texture—a Continental innovation which in this country has principally been used to imitate (often very successfully) the texture of plastic paint.





3

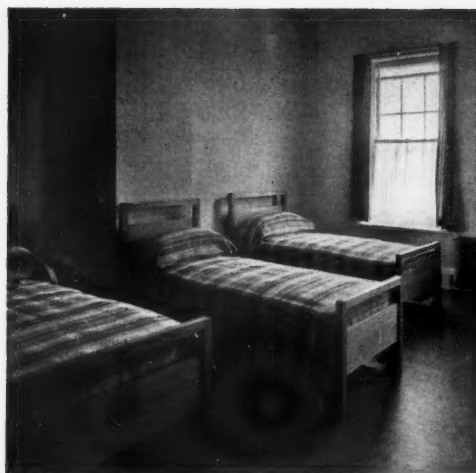


4

Some concession to period precedents may be necessary in catering for the small market for hand block-printed patterns, but this still leaves scope for original design. On the opposite page are shown several from a series of designs by Edward Bawden and John Aldridge put on the market this summer. 1, "Rose" by Edward Bawden.

2 (left to right), "Royal Oak" by John Aldridge, "Flute" by Edward Bawden and "Lace," by John Aldridge. 3, patterns from a series designed in 1933 by R. Y. Goodden; the first attempt to establish a standard of modern design in this country. Those illustrated in 4 are of German origin, produced cheaply under ordinary commercial conditions.

Wallpapers for



5



6

5, a simple patterned paper used in the London Transport Convalescent Home at Hythe, a scheme designed by Gordon Russell. Such a room provides obvious scope for the element of gaiety which wallpaper can introduce. 6, a wood veneer paper used on the walls with a

patterned ceiling and frieze, the latter one of the patterns designed by R. Y. Goodden shown on the previous page. The interior was carried out by Gordon Russell for Garrards the clock-makers and shows the flexibility of wallpaper as a decorative medium.

"Wallpaper, that old exponent of disgusting designs, has declined in popularity and become a standing joke merely because the manufacturers lack the initiative to introduce patterns which because they stray a little from the accepted flowery groove may be a slight commercial risk." This complaint made by a modern architect writing in *THE ARCHITECTURAL REVIEW* of February, 1932, remains substantially true today, for modern designs in wallpaper which can be obtained in this country are almost entirely the work of Continental manufacturers and designers.

The earliest attempts at modern design (as in so many other spheres) originated from the Bauhaus, and these set a contemporary standard which was followed in Germany by the N.D.K. papers, the latter being available in this country. A Swiss firm whose papers are also obtainable in this country has produced some intelligent patterns printed in oil colours which are fadeless and can also be scrubbed with a brush using soap and water. Papers printed with metallic colours come from the same source. This gives a silky sheen and while the temptation to produce very effective imitations of period brocades has not been resisted, modern designs have been produced.

In this country co-operation between manufacturers and the best modern designers has been almost non-existent, and the attempts which have been made to influence standards has more often been the independent effort of the individual designer. In 1932 and 1933 some patterns were designed by Edward Bawden which, without departing much from eighteenth and nineteenth century types had a genuinely modern flavour. These were printed by the litho offset process in small sheets. His recent designs, and those by John Aldridge which were exhibited recently at the Little Gallery, are block-printed and exhibit a careful study of this method of production and its particular characteristics. Block-printed wallpaper is considerably more expensive than the machine product and it is perhaps the consideration of the likely market which has dictated a slight over-emphasis of delicacy and charm in these designs.

Apart from single patterns here and there the only other wallpapers of a generally modern character are some designed by R. Y. Goodden, himself an architect. Variations of check patterns and simple motifs in subdued colourings indicate, in these papers, the possibility of modern wallpaper patterns but, unaccountably, no large-scale manufacturer has yet followed this lead. Some few good patterns have crept on to the market in recent years and in some cases a tradition in the production of good period patterns has persisted, but generally speaking present-day manufacturers are all too ready to satisfy the demands of an ephemeral Mayfair revival rather than make an intelligent attempt to keep pace with the advancing field of modern design in co-operation with the modern architect; nor, one

W A L L P A P E R S I N U S E

for modern use

might add, has such co-operation in other trades in recent years always been unprofitable.

To suggest not only the type of design which is necessary but also suitable methods of using wallpaper one must first separate its function as a background for furniture, fabrics and pictures from its possibilities as mural decoration. The method common among manufacturers of covering plain textured papers with appliqué motifs, corner sprays, panelled and cut-out borders and suchlike irrelevant decoration shows how little this essential difference has been grasped. Some commercial designs such as scenes with ships or extensive floral and landscape effects, which run round above the dadoes of billiard halls and hotel lounges, although lacking in originality, at least recognize their function as mural decoration in a room which demands or can accommodate it. There may indeed be a field for the mass production of mural designs supplied in lengths of wallpaper for which many eighteenth-century patterns have set a precedent, but the main function of wallpaper as a general background is likely to remain predominant. It is untrue to suggest that the present trend of modern architecture prohibits the use of a patterned wall surface, for provided the colour tones used are not strongly contrasted there is considerable scope for the imaginative designer. A great variety of texture in plain embossed papers is now to be had, though unfortunately many of these still contrive to be vulgar and strident. It would be unnecessarily purist to condemn the practice of imitating the texture and surface aspect of other materials by this method, and some embossed wallpapers such as a canvas texture, provide a background eminently suited to the modern room, but taste and discrimination are no less necessary in the production of an embossed plain paper than in a pattern. It is interesting to note in this connection the success with which manufacturers have imitated the grain of various woods. It is important if such imitations are to be used that the actual wallpaper substance should not be disguised by veneered or composition mouldings, added in an attempt to imitate an actual panelling scheme.

The cheapness of wallpaper and its ease of application on to almost any wall surface lends itself to more adventurous treatment than a mere covering of all the walls of a room in a single pattern. Space division can be suggested or emphasized by different shades of plain paper and a patterned paper on one or more flanks can be more effectively displayed with a plain paper on the remaining surfaces (see illustration opposite).

For entrance halls, nurseries and other rooms in which furniture and fabrics do not play a large part a bolder pattern can be used. Merely to fall back on a plain painted surface is an admission of defeat on the part of the interior



7



8

7, an entrance hall with a pattern of spots effectively linking the various wall flanks. 8, a dining-room by

Gordon Russell. A simple pattern of curves provides a contrast to the straight lines of the furniture.

designer, for wallpaper can clearly provide a decorative element different in character from any other decorative feature.

Technical advances in the production of fadeless and washable papers are being made, and the gradual maturing of modern architecture as a distinctive style has resulted in a greater flexibility

in interior decoration. Wallpaper as a mass produced material is modern in this respect and being the cheapest available material for the purpose which it serves, is likely to persist for domestic use: co-operation between manufacturers and designers to supply the right type of modern wallpaper is therefore urgent.

Other Materials

Lincrusta

This is a plastic material from which a relief ornament is pressed. The basis is linseed oil, which is oxidized in a large cylinder and then allowed to cool, forming a jelly-like substance. Mineral and vegetable fillers, such as whiting, lithopone, China clay, corn dust, wood flour and Kieselguhr are added with any necessary colouring pigments. Waxes and resins are also incorporated to give ease in running. The mixture is then kneaded and rolled and finally minced. It is then coated on a paper backing and while soft passed between an engraved and a plain roller to receive the relief pattern. Any kind of painted finish can be applied when the material is hung. Its most common form since 1870, when it was first produced, has been as an imitation of oak panelling, and stained and varnished in a good rich brown it has persevered on the dadoes of countless pubs for over fifty years. It has good sound absorbent qualities.

Heavy relief papers

There are many varieties of papers in heavy relief, mostly embossed from paper stock while in a plastic condition. The water is extracted by pressure applied on the embossed roller and plain roller with a thick cushion of web felt in between. The embossed paper is then dried and sized. As a material, it is chiefly used to produce imitation plaster ceiling patterns of a Jacobean type, but it can well be used to give a light texture where a more durable material is required than an ordinary wallpaper, and is a good covering for cracked or damaged walls.

Lancaster cloth

This is a muslin base impregnated with a linseed oil compound. A slight texture can be obtained and generally the surface is similar to paint, being equally washable. It is extremely pliable and is easy to hang. A number of plain shades can be obtained, but patterns available are rarely more than a reproduction of everyday wallpaper patterns.

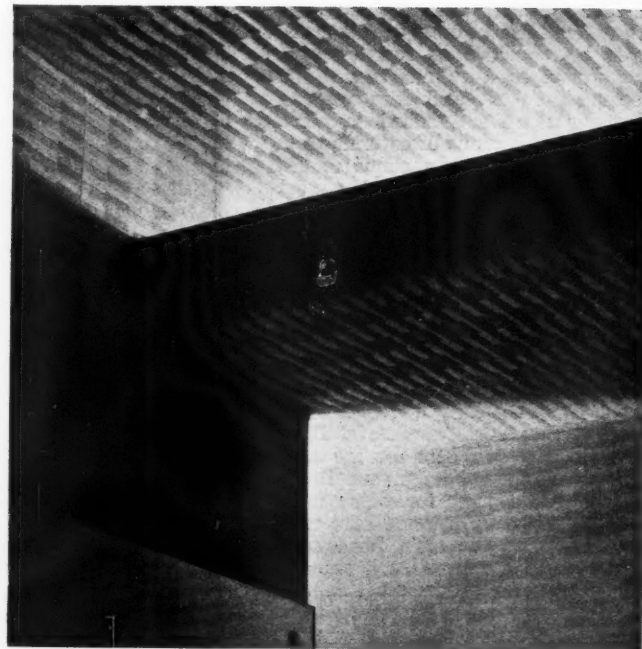
Wood veneer papers

Many types of wood veneer mounted on a paper backing of some sort are manufactured. One kind imported from Japan is an extremely thin peeled veneer which has been in use for some time for covering boxes. The small size of the sheets available usually dictates a squared pattern with the grain running alternate ways. Other types have a thicker veneer

on a paper backing and require a particularly strong adhesive and careful hanging.

Grass cloth

This is the bark of the Honeysuckle which grows on the mountains in Japan. The vine is gathered, torn in fine strips and woven in 7½ yard lengths on old-fashioned hand- looms by peasant workers. It is then backed with paper and stained. Its material, colour and texture make an extremely good background for modern rooms, and of all the materials dealt with in this supplement has been the most widely used by modern architects. Various skilful imitations of its texture have been produced in embossed papers.



9



10

9, Lincrusta, in a special design by Raymond McGrath used in the B.B.C. building. The pattern was designed to reflect light in addition to its acoustic qualities. 10, Japanese grass cloth used in the living-room of a house in Bayswater, architect Denys Lasdun. Its especial advantage here is as a background for pictures and objets d'art.

A Cottage Ornée for Mr. Jorrocks

By the greatest good luck in the world, Diana Lodge, within a stone's throw of the kennel, came vacant this morning, and not having the slightest doubt that on inspection of the accompanying list of subscribers to the hounds and members of our celebrated hunt, which you will see by the letters A. and B. prefixed to their names, contain very few of those most horrible characters water-drinkers from choice, you will immediately accept the honourable office of "Master," I have engaged it for you at the very moderate rent of four guineas a-week, *including everything*. It is a cottage ornée, as you say in France, entered by an ivy-covered trellis-work arch, tastefully entwined with winter roses, now in full blow. In the passage is a highly-polished Honduras Mahogany table on claw feet castors, for hats, whips, gloves, cigar-cases, &c. On the right is a dining-room of comfortable dimensions, with another Honduras mahogany table, capable of dining eight people, the orthodox size for a party, with a Honduras mahogany cellaret sideboard with patent-locks, and a dumb-waiter on castors. The carpet is a Turkey one, and the rug a Kidderminster, of a pattern to match the carpet. On the left of the passage is a drawing-room of the same size as the dining-room, furnished in a style of unparalleled elegance.

The chairs, ten in number, are of massive imitation-rosewood, with beaded and railed backs and round knobs along the tops, and richly carved legs. In the centre is a beautiful round imitation-rosewood table on square lion-clawed brass castors, and the edge of the table is deeply inlaid with a broad circle of richly-carved, highly-polished brass. Against the wall, below a costly round mirror, supported by a bronze eagle in chains, is a square imitation-rosewood table inlaid with satin-wood in lines containing two drawers on each side, with ivory knobs for handles. The carpet is a fine flowered pattern, richer than anything I can describe, and the whole is wonderfully complete and surpassingly elegant.

There are four bedrooms, and a dressing-room which holds a bed, and a kitchen, back-kitchen, scullery, pantry, and other conveniences. To the back is a nice little outlet of a quarter of an acre, laid out in the style of the Jardin des Plantes at Paris; and there is a splendid old patriarch of a peacock, that struts about the walls, spreads his tail, and screams delightfully. In short, it appears to me to have been built with an eye to the residence of a master of hounds.

SURTEES.

*A Letter from Miserrimus Doleful, M.C.,
to Mr. Jorrocks. From "Handley Cross" 1843.*

MARGINALIA

Thank the War

Although the war has brought almost all private building activity to a stop (or, put from another point of view, in the words of the Georgian Group's recent announcement, "now that the usual threats to Georgian buildings are in abeyance") architects and builders can find a little consolation in considering some of the benefits that the exigencies of war-time may bring to their peace-time occupations.

The most notable of these come under the heading of standardization. The unnecessary multiplication of patterns and shapes when one would serve tends to disappear when all

output is restricted, and the sensible future when a lot of design is done in prefabricated units seems to be brought appreciably nearer. But one sphere in which more specific progress can be recorded is that of colour standardization. We are told that for the first time there is now an official khaki shade, to take the place of the dozens of shades varying from a warm brown almost to a bright green that previously went under that name, even for official purposes. And during the past month the British Colour Council (through their Hosiery Advisory Bureau) have issued a list of ten shades which they advocate as a complete range of colours for silk stockings.

Whether this brave attempt at partial standardization in a field where the widest diversity has been looked on as a virtue will succeed is doubtful, but while they are about it the Council might try their hand at the equally necessary task of improving nomenclature. They might start with their own list, for their ten recommended colours seem to have been christened on no system whatever: some of the names are faintly descriptive, some presumably evocative of something and the rest just "fancy." None of them correspond to any pigment you can buy at an artist's materials shop. The ten shades are: Burnt Nude, Carb, Goblin, Newmarket, Mist Beige,

Graphite, Dryad, Gunmetal, Vogue and Copper Stain. If our paint manufacturers' adopt this sort of inspiration the interior decorator's life will be more impossible than ever.

Art for the General Public

For some years the exhibitions organized in the provinces by the Institute of Adult Education have been filling a big gap without getting much praise or publicity. Their object has been to show loan collections of good representative contemporary art in places that otherwise have no opportunity of seeing contemporary art at all. Now for the first time the Institute has turned its attention to London, feeling presumably that even London may suffer from a dearth of good pictures now that public galleries are closed, and that in these difficult times the ordinary man or woman (as distinct from the connoisseur or professional critic) must be finding it even more difficult to find opportunities for looking at pictures.

So the chief points about the exhibition of English and French paintings organized by the Institute, which was opened on November 15th by Sir Kenneth Clark, are: that it is near the centre of business London (at the City Literary Institute, Stukeley Street, Holborn), that it is free and that it is open till eight o'clock every night and on Saturday afternoons.

The pictures on view are all borrowed from private collections or from the artists. They are intentionally miscellaneous and illustrate no consistent viewpoint; but because of their source there is some unity in the collection as a whole, representing as it does the taste of the fairly orthodox well-to-do English collector of the post-1918 years. Though orthodox from the point of view of the most progressive movements of today it is sufficiently adventurous and stimulating to serve its purpose very well of giving the general public an opportunity of widening the scope of their own likes and dislikes about art.

The exhibition contains sometimes distinguished, and at least typical, examples of the work of Sickert, Augustus John, Spencer Gore, Raoul Dufy, Peploe, Wyndham Lewis, Gertler, Paul Nash, Stanley Spencer and many others. It will remain at the City Literary Institute until December 20th, after which it will go south of the river to Morley College.

New Development

A recent report (October) of the Council for the Preservation of Rural England states that all Ministry of Health official inquiries into planning schemes have been cancelled and adds "it is feared that advantage may be taken of the position to consolidate arrangements for large-scale development in the future which in normal circumstances would never have received permission. As an example the Council have been notified recently of grandiose proposals for development in the neighbourhood of Ditchling Beacon, Sussex, and have made representations to the East Sussex County Council and the Chailey Rural District Council accordingly." The example quoted is obviously of a kind that

The Gentleman Collector

One of the most extraordinarily miscellaneous collections of Gothic Revival architecture is to be found at Wickham, near Lambourn, in Berkshire, of which some photographs are here reproduced. It is not on a large scale nor is it well known, but both the rectory and the church of St. Swithun will surprise the visitor. The rectory itself was changed from a decent 18th-century red brick house into a 15th-century building as late as the middle of the last century. But even then it was gothicized rather in the spirit of Horace Walpole than of Pugin.

In the garden stand two octagonal piers, one of stone, one of chalk; the one crowned with a group of 13th century capitals and the stone cross which surmounted the spire at Welford, the other with a large vase-shaped stone and another cross. Both these are well placed and still give the exact effect intended when the garden was laid out.

Nor does the rectory itself, with a tower copied from the house of Jacques Cœur at Bourges, until recently capped by an ornate stone spire over a hundred feet high, lack distinction.

It is, however, the church itself that deserves most attention. Except for an untouched tower which dates from Saxon times, nearly everything is due to the restoration, or rather rebuilding, that took place in 1843. It is said, though, that the Jacobean pulpit is still to be found, mutatis mutandis, as a cupboard in the servants hall at Wickham House.

Yet even here the wide cultural interests of the incumbents have managed to relieve the pure neo-Gothic aridity. For instance, the font, which might be described as "modern and ornate," has a magnificent cover, which was exhibited at the Great Exhibition of 1860 as a specimen of what New Zealand could accomplish in wood-carving.

There used also to be a vinery, built almost with the vigour of a Paxton, the back wall containing six large three-light windows. Five of them were genuine 15th-century relics, taken from the neighbouring church at Welford, which also contributed a 13th-century triplet and a 15th-century doorway. Unfortunately this growing vinery has been demolished and most of the glass now lies scattered on the lawn.

The late rector's interests as a gentleman-collector were not, however, confined to English exhibitions, and his visit to the great Paris Exhibition resulted in one of the most startling effects to be found in any English church. In the north isle, counterbalancing the stock figures of angels in the nave, the hammer-beams of the ceiling are ornamented by elephants heads. They are of plaster, are gilded, and number eight in all.

They must, even at the date of their installation, have always produced a somewhat bizarre effect; but, to a generation that knows negro spirituals only too well, the similarity of their ears to the angels' wings endow them with an unexpected quality of simplicity and piety.

A. R.-W.

Wisbech

The photographs illustrating the article on Wisbech in this issue were taken by the author, by John Piper

and by Messrs. Ream. The panoramic drawings of the North and South Brinks, reproduced on pages 239 and 241, are by John Piper. The photographs showing Wisbech as it was eighty years ago are by courtesy of the Wisbech Museum. Plate v, showing the drawing-room mantelpiece at Bank House, is given with the kind permission of the Hon. Alexandrina Peckover, the owner of the house.

Wallpapers

We are indebted to Messrs. Gordon Russell for the photograph of German wallpapers on page 255 and to the Little Gallery for those illustrating papers designed by Edward Bawden and John Aldridge on page 254 of the Wallpaper supplement in this issue.

CORRESPONDENCE

The Editor,

THE ARCHITECTURAL REVIEW.

SIR,

I was unable to observe at first hand the reactions of our young, middle-aged, elderly and senile architects to the visit and the engaging outspokenness of Mr. Frank Lloyd Wright, because I had sailed for the U.S.A. a few days after he arrived in England. I may say that I was eagerly questioned about those English reactions by architects in New York, Los Angeles and San Francisco: they had an idea that Frank Lloyd Wright would stir things up a bit. Apparently he did, and with that wicked American cunning he disclosed the innate conservatism of all generations of English architects. The die-hards of functionalism seem to have risen beautifully: of course, we all know that they despise humanism — which they label romanticism—but the special genius of Frank Lloyd Wright made it sun-clear to all the world that their crabbed contempt for humanistic values was a deplorable defect. What I suppose they found harder to forgive, was the fact that Mr. Wright outgrew all that mechanistic stuff when our bright young modernists were still in their cradles.

What a tragedy it is that we have no Frank Lloyd Wright in this country, and that we've had to adapt alien ideas from Europe and subdue our own rich common sense about climate and comfort.

I have had some small opportunity of studying the influence of Frank Lloyd Wright in America; and it is a healthy, natural and splendidly inspiring influence, without any tedious creeds hanging on to it, and without the shadow of that bearded bore, Karl Marx, blurring the clear, sweet sense of his ideas about buildings for human beings to use.

I gather that only the bright young moderns took any real notice of Mr. Wright's views: I suppose some of the others turned in their sleep, but thank the Lord the young men did realize that something big had come their way, which had to be noticed: it wasn't altogether their fault if they misunderstood him — they've been frowning with Continental fancies too long. But they were all glad he came: I for one hope he'll come again to wake us up. Hail Columbia!

Yours, etc.,

JOHN GLOAG.

East Sheen, S.W.



A remarkable collection of Gothic Revival remains, to be found in the village of Wickham, Berkshire, is described on this page under the heading "The Gentleman Collector." 1, the village church and rectory, the latter having a tower modelled on that of the Jacques Cœur house at Bourges. Its spire, shown in the photograph, has recently been pulled down. 2, one of the octagonal piers which stand in the rectory garden. 3, the ruins of the vinery, only pulled down last spring. 4, the font-cover in the church, acquired by a previous rector from the Great Exhibition of 1860. 5, oddest of all, plaster elephants ornamenting the hammer-beam roof brought by the same eccentric gentleman from Paris.

A BERKSHIRE MISCELLANY

should be carefully watched but one may take comfort in the thought that development of almost any kind (except the numerous camps dumped throughout the country whose temporary nature is always a little suspect)

is likely to cease for the duration. Indeed if the war lasts as long as some of the less sanguine experts have prophesied we may have seen the end of suburban and ribbon development as we know it.

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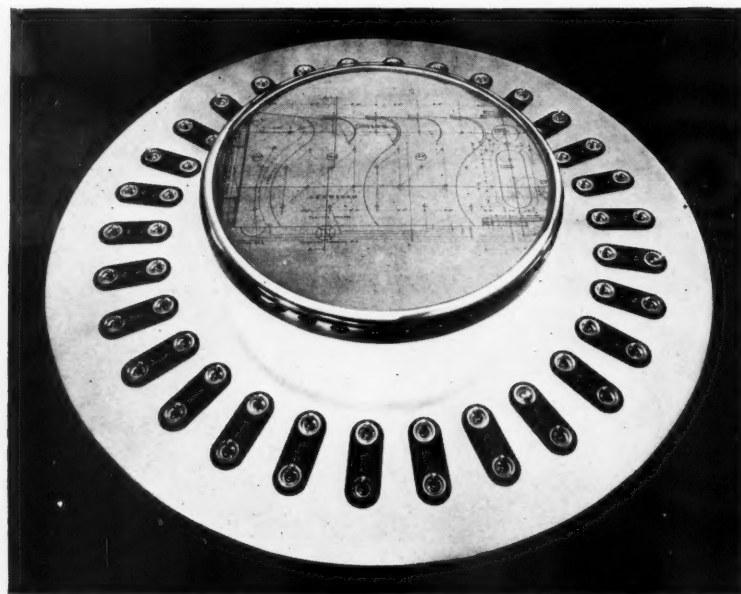
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Trade News and Reviews



The lighting control table in the new Troughton and Young showroom extension. In the centre is the plan of the whole showroom, with all its lighting points, which are operated from this table.

By
BRIAN
GRANT

Design for Light at the Lighting Centre

THE somewhat strange-looking contraption at the head of these notes is the "Aladdin's" lamp in the recent Troughton and Young showroom extension—a brisk rub, and your wish is fulfilled. Well, that is more or less how it works.

Though the object in the photograph closely resembles a helping of soup served up in Susie Cooper pottery it is, in fact, the control table operating the whole of the lighting effects throughout the showroom. In the centre of the table is the showroom key-plan encircled by a series of 60 switches. On the plan you note the key number of the particular light fitting or lighting effect you wish to look at, press the switch bearing the same number and—well, that's all there is to it. Simple but ingenious.

What this new Lighting Centre showroom lacks in size it more than makes up for in ingenuity. Every lighting fitting showroom must inevitably be prickly with fittings—ceiling fittings, wall fittings, floor standards and table lamps—so that the effect *en masse* is bound to be a little disconcerting to the would-be purchaser.

One sees so much all at the same time that it is often difficult to make up one's mind how much one likes or dislikes any particular single fitting. Again, there is the difficulty of trying to imagine just how the fitting might look in different settings and against different backgrounds.

The extraordinary flexibility of electricity as a light medium adds to the complexity of the showroom designer's problem. There is so much he would like to do in the limited space available, and ultimately he is compelled to squeeze a pint into a half-pint pot with the best possible grace.

The new extension at the Lighting Centre is modest in size but, thanks to the ingenuity of A. B. Read, it is a great asset to the existing showrooms. With more than a little success has he overcome a fundamental difficulty by contriving to have innumerable lighting fittings on show in such a way that each one can be appreciated without interference from the others.

Several interesting structural details contribute to this. The whole of one wall is composed of panels which jut out

at a slight angle. The ceiling is on four different levels, representing various heights of ceilings in houses and flats.

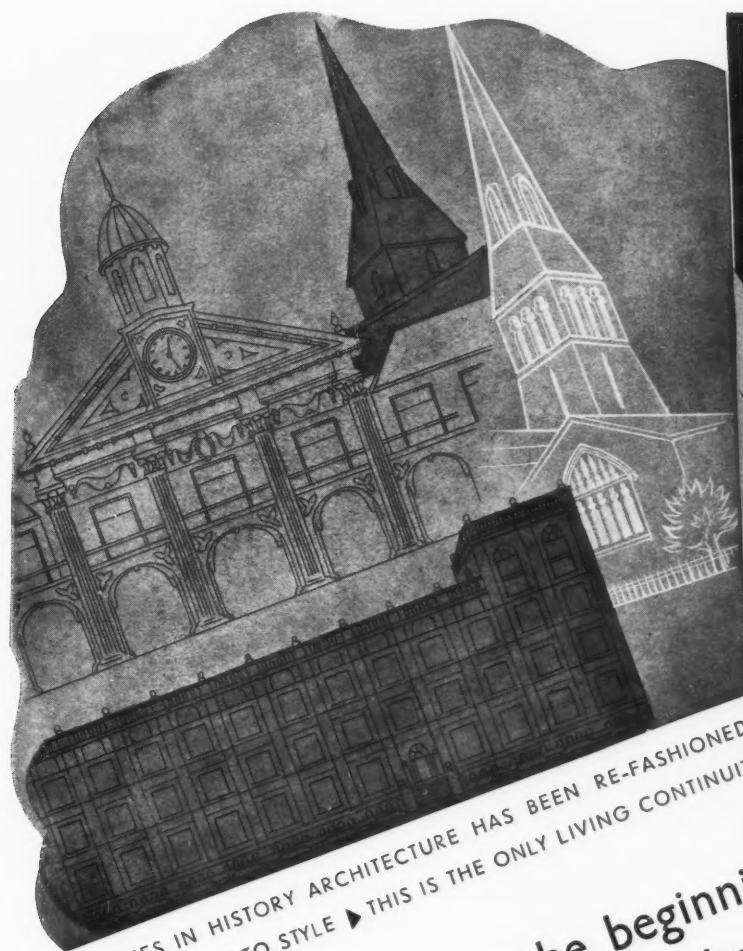
Four movable vertical screens, wedge-shaped in plan, and covered with a variety of finishes such as wood, wall-paper and paint, enable one to judge an individual light fitting against different backgrounds, and isolated from other fittings. Curved tracks in the ceiling allow all sorts and colours of curtains and fabrics to travel round and about the individual fittings.

The revolving corner (see illustration) is an additional piece of cunning. Altogether an exhilarating and intelligent bit of showmanship. The sort of thing we have learned to expect from Troughton and Young.

New Y.W.C.A. swimming pool

The Duchess of Kent, Honorary President of the Y.W.C.A. Central Club, officially opened the Club's new swimming pool early in May. Under-water lighting of the pool is by twelve 300-watt Benjamin

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Above, left, a detail of the enquiry bureau in the new Troughton and Young showroom extension at 143 Knightsbridge, S.W.1. Main lighting is from two large "Louverlux" fittings fixed flush with the ceiling. Above, right, a revolving fitment in the showroom showing lighting units against various backgrounds.

reflectors set in flush lighting ports along the two side walls.

Sterilization is by means of ozone, which is introduced to the pool through a flow pipe at the shallow end, and at the deep end through perforations in the terrazzo pool floor, a system providing complete sterilization and aeration of the whole of the water without any "dead spots." Bruce, Auld & Company were the contractors for the sterilizing installation. The architect for the pool was J. A. Hobbs. The National Fitness Council contributed a grant of £2,000 towards its cost. A photograph of the pool is shown on the next page.

Through the letter-box

"This made a New World"—the story of town gas. The British Commercial Gas Association in this entertaining little yellow-backed book tell the story of progress in the gas industry. I think most of us have a great deal of admiration for Mr. Thern, he is such an untiring little fellow who really does seem to have the interests of his 11,700,000 customers at heart, and one is not surprised to find that he has made his story extremely readable. Copies may be obtained from

the Association at Gas Industry House, Grosvenor Place, S.W.1.

A Handbook on Paint. This is another most readable little book with short contributions by John Betjeman, who writes on "Colour and the interior decorator," and Hugh Casson who does not think that architects know very much about colour ("it is not his fault, for in the training of an architect the art of colour is almost entirely neglected"), and looks forward to the time when they may be able to understand and use colour, not as a disguise, but in its true value as an essential element of architecture. The book closes with a chapter of technical data. Publishers—The Silicate Paint Company, Charlton, London, S.E., who will be pleased to send copies to REVIEW readers.

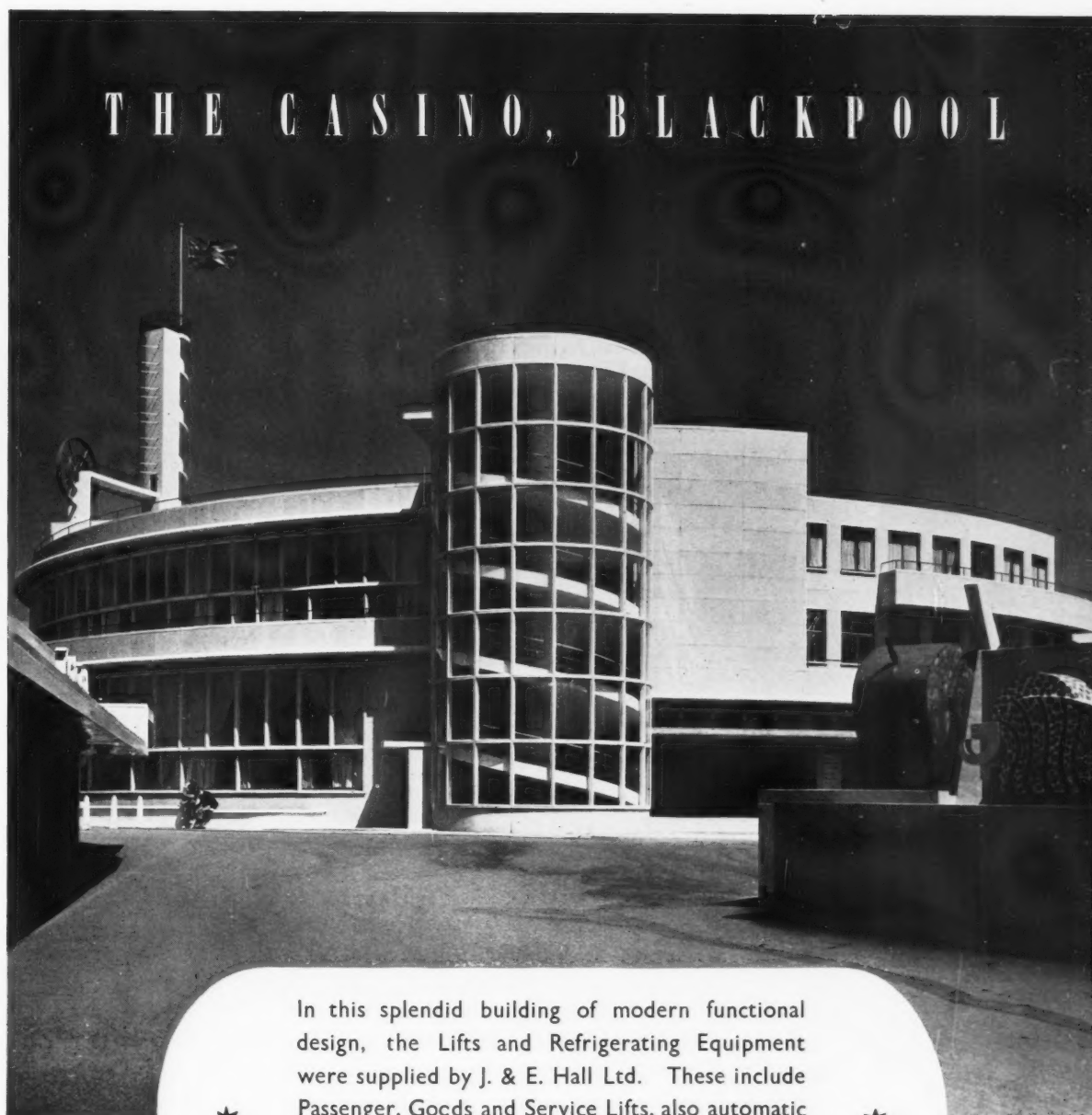
New G.E.C. Electric Exhaust Fan Catalogue. This is a plain catalogue with no frills. It serves, however, not merely as a price list covering a comprehensive range of ventilating equipment, but also as a technical guide containing much valuable information upon the subject of ventilation. Technical data and tables are presented in a sensible and simplified form enabling estimates to be made of

air performance under a variety of operating conditions without calling for any special knowledge of ventilating practice. Application for copies may be addressed to the G.E.C. head office, Magnet House, Kingsway, London, or to any of the company's many branch offices.

An Achievement in Structural Steelwork shows, in retrospect, many of the typical steel-framed buildings at the 1938 Empire Exhibition, Scotland. Today those same buildings are being dismantled and recovered "by methods as economic and systematic as those by which they were built." Practically all the large industrial buildings, including the tower and concert hall, at Glasgow were constructed in steel and many of them were erected in record time. Remembering the size of the exhibition and the amount of steel that was required for the making it is gratifying to know that the self-same steel, like the tent of the travelling showman, will see many another day in many another place. Copies of this brochure may be obtained from The British Steelwork Association, Steel House, Westminster, S.W.1.

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ARCHITECT: JOSEPH EMBERTON, F.R.I.B.A.

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New swimming pool at the Y.W.C.A. Central Club, London, opened by the Duchess of Kent on May 8th. J. A. Hobbs, L.R.I.B.A., architect.

describing the application of bakelite veneer to plywood and laminated board, and the fixing of bakelite wall panels direct on to timber framework. Copies from Bakelite, Ltd., 40, Grosvenor Place, London, S.W.1.

The "Rondos" sump valve

This is a new patented device for measuring and controlling the water in water-logged soil surrounding a building. The sketch on the next page shows the

"Rondos" sump valve in position in an asphalt-tanked basement—the operation and main functions of this installation may be described as follows :—

When the water-level detector valve is opened the water from outside the building immediately rises through the main pipe until it reaches its own level, thus the point to which the water rises in the glass gauge-tube indicates the level of the outside water.

This means that a constant check can be kept upon the pressure of water in the sub-soil, and should this pressure become threatening or inconvenient it can be released into the sump through the large liberating valve and pumped away; the rate of flow through the valve may be adjusted to suit the capacity of the available pumping apparatus—the pump can be built in and coupled to an automatically operated float switch or a suction pump can be lowered into the sump when required.

Many advantages accrue from being thus able to check and control the water pressure. For instance, it greatly simplifies the task of locating and repairing any leakages that might occur in the basement wall or floor. In locating the point of leakage in the tanking the outside water is drawn off through the liberating valve until the level

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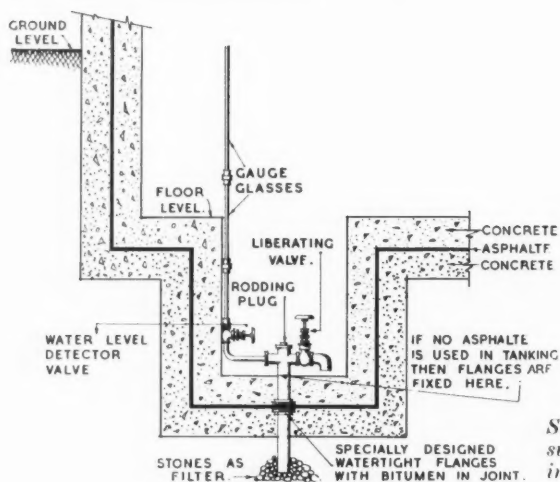
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TRADE AND CRAFT



Sketch of the "Rondos" sump valve in position in a tanked basement.

has been reached at which water ceases to enter the basement and by keeping the water constantly at this low level during the period of repair a perfectly dry basement is available and the repair work is carried out above water level. One can well imagine the saving in time, labour and therefore, cost, that would in a great many instances be effected.

A.R.P.

The "Rondos" sump valve should be of

special interest to those concerned with the provision of adequately equipped basement air-raid shelters for it is claimed by the manufacturers that flooding can be prevented, or satisfactorily dealt with, whether it be "due to natural infiltration" or to more violent causes such as "burst or fractured water-mains."

The manufacturers and distributors are Messrs. Dyson, Nott & Partners, Ltd. of 17, King Street, St. James's London, S.W.1 to whom all applications for details should be addressed.

The Buildings Illustrated

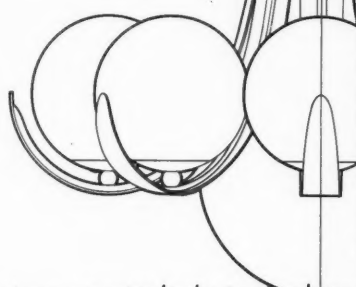
Casino at Blackpool.

Architect: Joseph Emberton.

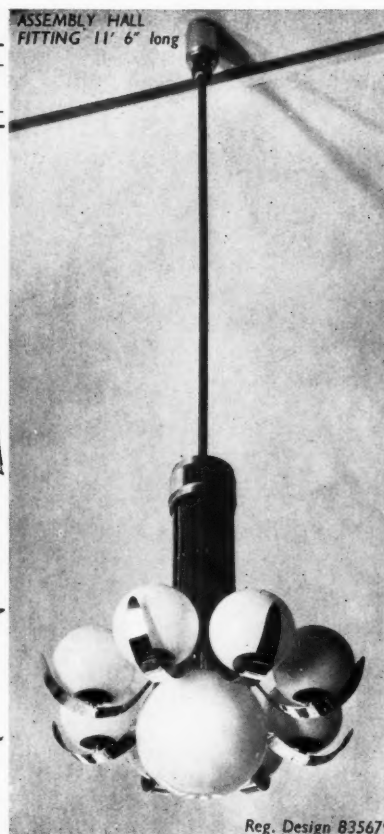
The general contractors were Blackpool Pleasure Beach Ltd. Among the sub-contractors and craftsmen were the following:—Armstrong Cork Co. Ltd. (cork flooring), Taylor Pearse and Co. Ltd. (railing, metalwork, etc., door furniture), Baldwins (Birmingham) Ltd. (door furniture to offices), B. and B. Plastering Ltd. (granierete), J. D. Beardmore & Co. Ltd., Bostwick Gate & Shutter Co. Ltd., Benham & Sons Ltd. (metalwork), British Vacuum Cleaner & Engineering Co. Ltd. (vacuum cleaning plant), Burn Bros. Ltd. (drainage), Carrier Engineering Co. Ltd. (ventilation and air conditioning), James Clark & Son Ltd. (glazing), Claude-General Neon Light Ltd. (neon installation), Drake & Gorham Ltd. (electrical installation), F. and E. Eastman Ltd. (tiling), Fenning & Co. Ltd. (terrazzo), Gaskell & Chambers Ltd. (beer services), Granwood Flooring Co. Ltd. (wood block flooring), J. and E. Hall Ltd. (lifts, refrigeration), Henry Hartley & Co. Ltd. (plaster), Haskins (shutters, blinds, etc.), Haywards Ltd. (roof lights, pavement lights), Horsley Smith & Co. (Floors) Ltd. (Murray end grain flooring) George Jennings (Lambeth) Ltd. (sanitary

MA LIGHTING FITTINGS

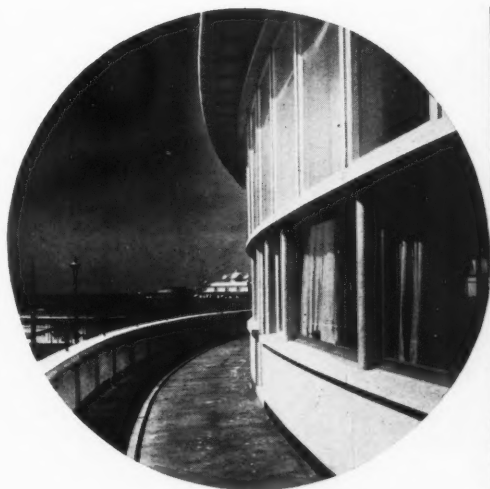
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Blackpool Casino. Architect: Joseph Emberton, Esq., F.R.I.B.A.

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fittings to flat), M. J. C. Johans (bronze windows), Knight & Co. (Engineers) Ltd. (rising stages), Limmer & Trinidad Lake Asphalt Co. Ltd. (asphalt), Matthew Hall & Co. Ltd. (plumbing), E. Pollard & Co. (cash desks), Shanks & Co. Ltd. (sanitary fittings), Strand Electric & Engineering Co. Ltd. (stage equipment), Thonet Bros. Ltd. (chairs, tables), Trussed Concrete Steel Co. Ltd. (reinforced concrete structures), Palorit Paints Ltd. (Tyloglaze finish in staff lavatories), Western Electric Co. Ltd. (loudspeaker equipment), Hall & Dixon Ltd. (stage curtains), J. Starkie Gardner Ltd. (magic doors), Architectural, Constructional & Electrical Utilities Ltd. (light fittings), J. Avery & Co. Ltd. (office curtains), Horace W. Cullum & Co. Ltd. (acoustic plaster), Danks (Netherton), Ltd. (boilers), Fletcher Russell & Co. Ltd. (coke grill), Fleetwood Trawlers Supply Co. Ltd. (flagstaff), B. Burkle & Sons Ltd. (doors, counters, panelling, etc.), Liquid Carbolic Corporation (Philadelphia), (snack bar and soda fountain), Stanley Works (Connecticut) (magic door mechanism), T. H. Tonge Ltd. (banqueting hall tables), A. Davey (curtains and carpets), N. V. Schokbetone (concrete facing slabs).

Showrooms in Oxford Street.

Architect : Joseph Emberton.

The general contractors were Griggs & Son Ltd. Among the sub-contractors and

craftsmen were the following :—Demolition & Construction Co. (demolition and excavation), Trussed Concrete Steel Co. (reinforced concrete engineers, who were also responsible for all the reinforced concrete work), James Clark & Son (glass), Troughton & Young Ltd. (electric wiring), Curtis Lighting Co. of Gt. Britain Ltd. (electric light fixtures), Carrier-Ross Engineering Co. Ltd. (electric heating and ventilation), Burn Bros. (London) Ltd. (plumbing), Joseph Chater & Sons Ltd. (sanitary fittings), Taylor Pearse & Co. (door furniture), Crittall Manufacturing Co. Ltd. (casements), Haskins (rolling shutters), W. A. Telling & Co. (plaster), Fenning & Co. Ltd. (granite), Finmar Ltd., British Ideal Patents and Furniture Ltd. (furniture), E. Pollard & Co. Ltd. (shop fittings), Bennie Lifts Ltd. (lifts), Eric Munday (lettering), Smith's English Clocks Ltd. (clocks), Bull Motors (branch of E. R. and F. Turner Ltd.) (Bull super-silent motors), Pilkington Bros. Ltd. (glass bricks), Claude-General Neon Lights Ltd. (sign), Wm. Mallinson & Sons, Ltd. (special timber and veneer for wall-panelling).

House near Romsey, Hampshire.

Architect : Raglan Squire.

The general contractors were K. L. and H. N. Smith Ltd. who were also responsible for the bricks. Among the sub-contractors and craftsmen were the following :—Everseal Products Ltd. (special

roofings), James Clark & Son Ltd. (glass), Heat and Light (central heating), Aga Heat Ltd. (Aga cooker), Bratt Colbran Ltd. (grates), Edward Marshall Ltd. (sanitary fittings), Comyn Ching & Co. Ltd. (door furniture), Williams & Williams Ltd. (casements), J. A. Dean Ltd. (sun-blinds), A. Donovan Ltd. (doors), R. Cattle Ltd., Peerless Kitchen Cabinets Ltd. (joinery), Tile Decorations Ltd. (tiling).

House near Chester.

Architect : Raglan Squire.

The general contractors were H. V. B. Thorrington Ltd. Among the sub-contractors and craftsmen were the following :—Everseal Products Ltd. (special roofings), Colthurst Symonds & Co. Ltd. (spanish tiles), James Clark & Son Ltd. (glass), Ideal Boilers & Radiators Ltd. (boilers), Comyn Ching & Co., Ltd. (door furniture) Williams & Williams Ltd. (casements).

House at Brampton, Cumberland.

Architects : J. L. Martin and Sadie Speight.

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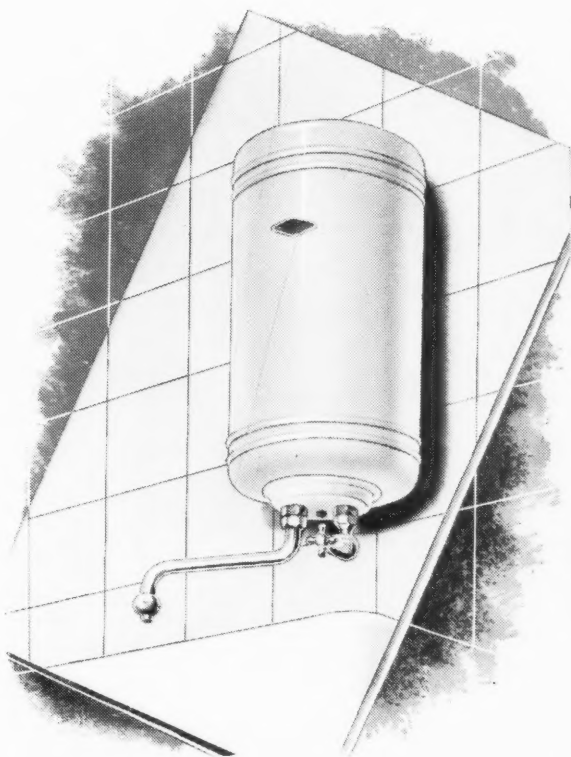
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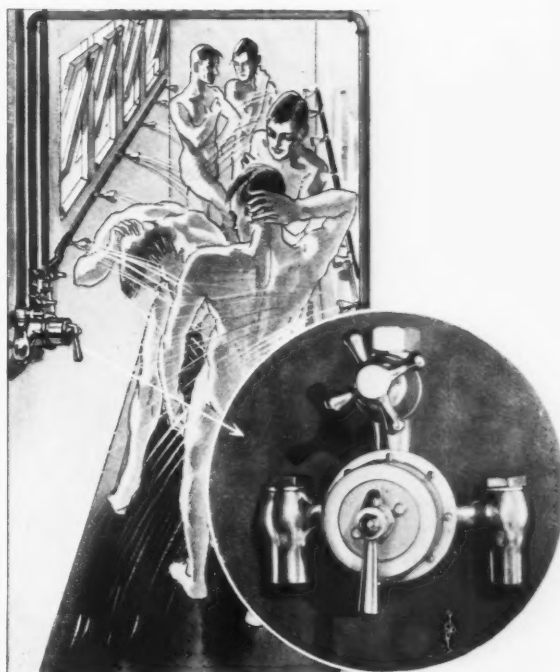
Board of Education circular (Physical Training series 14, 1938).

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Civic Centre at Tunbridge Wells.

Architects: Percy Thomas and Ernest Prestwich.

The general contractors were R. Corben & Son Ltd. who were also responsible for the panelling to assembly hall. Among the sub-contractors and craftsmen were the following:—J. H. Nicholson & Co. Ltd. (heating and ventilation), Troughton & Young Ltd. (electrical installation and stage electrical work), Trussed Concrete Steel Co. Ltd. (reinforced concrete stairs,

floors and roof, floors), Connies & Meaden Ltd. (constructional steelwork), John Stubbs (Marble & Quarzite) Ltd. (marble floor and wall linings), Korkoid Decorative Floors Ltd. (flooring), Hollis Bros. & Co. Ltd. (wood-block floors), Art Pavements & Decorations Ltd. (terrazzo wall linings and staircases), Gilbert Seale & Son Ltd. (fibrous plaster), Crittall Manufacturing Co. Ltd. (metal windows), Henry Hope & Sons Ltd. (lantern lights and haystack light), H. H. Martyn & Co. Ltd. (decorative metalwork, special windows and canopy), Shanks & Co. Ltd. (sanitary fittings), Merchant Adventurers of London Ltd. (electric fittings), Limmer & Trinidad Lake Asphalt Co. Ltd. (asphalt tanking and roofs), Shapland & Petter Ltd. (flush doors and wooden furniture), Hall & Dixon Ltd. (stage equipment, curtains and safety curtain), W. & A. Baker & Co. (1910) Ltd. (wrought iron balustrades), Strand Electric & Engineering Co. Ltd. (footlights), W. G. Harris & Co. (carpets and blinds), W. Lusty & Sons Ltd. (balcony chairs), Cox & Co. Ltd. (auditorium chairs and lounge chairs and tables), Carter & Co. Ltd. (tiling to pay-boxes and floors), Francis Morton Junior & Co. (spring floor), Sumerling & Co. Ltd. (kitchen equipment), British Plaster Board Co. Ltd. (acoustic plaster), Pilkington Bros. Ltd. (etched glass), James Gibbons Ltd. (locks and furniture and cell doors), Bath & Portland Stone Firms Ltd. (portland stone), R.I.W. Protective Products Co. Ltd. (waterproofing to stone-

work), Mander Bros. Ltd. (paint), Walspamur Co. Ltd. (acoustic paint), Electrical Installations Ltd. (electrical installation), G. T. Rackstraw Ltd. (panelling in court), Thermolux Glass Co. Ltd. (court room laylight), Roneo Ltd. (steel furniture), Bromsgrove Guild Ltd. (wrought iron balustrades), Haskins (rolling shutters), S. F. Bowser & Co. Ltd. (petrol pump), Gent & Co. Ltd. (electric clocks), S. Dixon & Son (fire appliances), J. B. Johnson Ltd. (plaster), Bull Motors (branch of E. R. and F. Turner Ltd.) (Bull super-silent motors).

Penthouse Flat at Highgate.

Architects: Tecton.

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(The Architect and Building News of June 2nd, 1939)

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A general view of the back seen across the gardens

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On the north bank of the Lake of Zurich is the agricultural section, the collection of Swiss villages and the light-hearted amusement section where the decorations are cheerfully surrealist. The large Festival Hall can be seen in the centre foreground.

Trade News and Reviews

By BRIAN GRANT

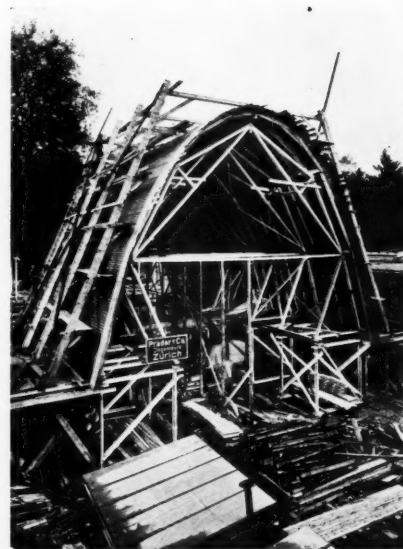
The Swiss National Exhibition

THE Swiss National Exhibition, held this year in Zurich, has been sadly overshadowed by the Brobdignagian international Fair at New York; this is a pity, for there is a lot that we can learn from the competent and intelligent way in which the Swiss people have planned and organized their own national show.

The exhibition at Zurich has as its aim the portrayal of the life of the Swiss Nation whose people, speaking four different languages, co-operate in all fields of learning and industry to form a national unity. It is magnificently sited and is divided into two sections, one on either side of the lake of Zurich. At the head of these notes we see an aerial view of the north side which is devoted to pavilions of agricultural and rural occupations with some replicas of traditional work carefully grouped amongst the trees. The land formerly was parks and gardens and great care has been taken not to destroy any of the trees. On the south side of the lake are all those exhibits concerned with industrial, educational and other aspects of Swiss life.

The planning and lay-out was entrusted to a group of young architects working under the direction of Armin Meili, with Hans Hoffmann as chief architect. Their determination was that the exhibition should not merely be a fair with groups of competing exhibits, but rather a synthesis of the national life, and all the pavilions have been carefully related to form a continuous and balanced display.

One most interesting aspect of the exhibition is the exploration that has been made of the architectural uses of timber in enlightened contemporary hands. There is nothing here of the sham monumental; everything is thoroughly practical. Of outstanding interest, too, is the concrete exhibit designed as a parabolic reinforced concrete arch. The photograph at the foot of this page shows the arch in course of construction; on the next page we see the exhibit nearing completion; although the arch is over 50 ft. high, it is never more than 2½ ins. thick.



The concrete exhibit in an early stage of construction.

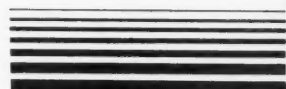
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Aluminium

Switzerland's chief metal, aluminium, is exhibited in a pavilion of striking design. In the photograph that accompanies these notes we get a worm's-eye view of the sheet aluminium canopy which is constructed on a wooden frame and supported on aluminium columns. The internal walls of the pavilion are lined with corrugated asbestos sheets painted white, thus providing a suitable background for the aluminium castings and extrusions exhibited.

Recent statistics show that the consumption of aluminium and magnesium is at least 60 times greater today than it was in 1900. The world output of aluminium for 1938 is estimated to be well over 550,000 tons, of which total Great Britain and Canada produced 79,000 tons. Germany, with a total of 100,000 tons last year, has now surpassed U.S.A. in production and Russia is said to be increasing her output rate even more rapidly than Germany. According to recent computations of the mineral deposits of the earth's crust to a depth of ten miles, metallic elements comprise 25.22 per cent. Of this metal content aluminium is present to the extent of 31.9 per cent., iron 19.9 per cent., and the main constituents of bronze, i.e. copper and tin (with relatively minor, but important, amounts of lead and zinc) comprise together probably rather less than 2 per cent. This indicates that, of the structurally valuable metals, aluminium is by far the most abundant.

During the past few years architects in every country have shown the greatest interest in the development of aluminium uses. They like the metal for its appearance, and its mechanical properties and workability offer the widest choice of possibilities to the designer and fabricator. So far as this country is concerned it is fortunate that the aluminium-producing companies are genuinely interested in establishing the closest collaboration between themselves, the architect-designer and the fabricators and craftsmen. The British Aluminium Company and the Northern Aluminium Company have both issued many excellent publications which supply, in an admirably condensed form, the sort of information that must be available if progress and development are to be sound rather than "stuntish" and experimental.

The Building Centre in New Bond Street is to have a new shop front. This is good news. The shop front is to be



The concrete exhibit at the Zurich exhibition nearing completion. Although over 50 ft. high the shell of this reinforced concrete arch is never more than 2½ inches thick. Designer: Robert Maillart.

designed and executed in aluminium and the Northern Aluminium Company, in collaboration with the directors of the Building Centre, have organized a competition which is open to all architects and architectural students of British nationality. Prizes of £100 and £50 will be awarded for the two winning designs. The assessors appointed are Robert Atkinson, Maurice E. Webb, R. S. Lavers and F. R. Yerbury. Applications for details and conditions should be sent to The Building Centre—they should be sent immediately, as I understand that the closing date is not so very many weeks off.

G.V.D. lighting at Battersea Power Station

The photograph reproduced on the next page is a view of the main Control Room at Battersea Power Station. As originally designed the large laylights, extending over practically the whole of the ceiling, admitted daylight but A.R.P. requirements have now decreed that all daylight must be excluded from this source, and artificial light substituted. In planning the lighting G.V.D. Illuminators Ltd., were asked to reproduce as nearly as possible the effect of daylight. Illumination had to be even, glareless and practically shadowless; there must be no high lights on the dials and instrument panels. The photograph,

taken without any subsidiary lighting, certainly indicates that the new lighting of the laylights has been most successfully carried out. It will probably surprise you, it did me, to be told that although the eight laylights cover an area of 5,700 square feet only twenty-eight lighting points have been found necessary.



The canopy to the Aluminium Pavilion is made of sheet aluminium on a wooden frame and supported on aluminium columns. Architect: R. Winkler.

TRADE AND CRAFT

New York World's Fair



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and it is significant that in those structural and decorative schemes, aluminium and aluminium alloys have figured increasingly.

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"The A.B.C. Guide to Glass in Architecture, Building and Decoration" by G. S. Reynolds and G. P. Hughes. Here is a small and eminently practical volume that every architect will like to have, a simple dictionary of glass facts and formula carefully compiled and suitably illustrated. The publishers are Stone & Cox, Ltd., of Africa House, Kingsway and the price is 5s. (5s. 6d. post free). In preparing this extremely useful handbook on glass the authors have enlisted the co-operation of the principal glass manufacturers and merchants and all the data and technical information given is both up to date and reliable.

"Ceramics in Art and Industry." This is the title given to the house journal issued by Doulton & Company, the second number of which has just been published. House journals as a rule are very wearisome affairs—from pillar-box to waste-paper basket is the route taken by the great majority of them. Those responsible for the production of this Doulton magazine may rest assured that no such untimely fate will reward their efforts. "Ceramics in Art and Industry" is an exceedingly well-produced and most interesting journal, and I am not surprised to learn that in view of the demand, they had for their first number, Messrs. Doulton have printed 6,500 copies of this second issue.



The lighting of this Control Room is from the eight large laylights extending practically over the whole of the ceiling. Although the laylight area totals over 5,700 square feet only twenty-eight lighting points are employed. Lighting engineers: G.V.D. Illuminators, Ltd.

G.E.C. Ironclad Switchgear.—The new edition of the G.E.C. Ironclad Switchgear Catalogue has just been published. As in previous years the catalogue comprises chiefly non-automatic ironclad switch and fuse gear, together with

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certain circuit breakers, contactors, earth leakage trips, thermostats, transformers and other control and protective equipment required for modern electrical installations. An important alteration has been made, however, in that the ironclad gear is now finished to match Silverlac conduit as standard instead of black enamel. This change involves no extra cost. There are, too, several additions. Among the most interesting are the all-insulated switch fuses and the combined switch fuse and transformer units for low-voltage safety lighting. The catalogue is carefully indexed and well illustrated.

Good Bricks and Tiles.—G. Tucker & Son, Ltd., of Loughborough, Leicestershire have produced this small book in order to provide architects with actual colour reproductions of many of the facing bricks and roofing tiles made at their works. In all there are eighteen colour illustrations, all are close-up details of brickwork and tilework so that one gets a good reproduction of the texture as well as the colours and colour combinations.

Automatic Central Heating with Coal.—Hopes catalogue No. 202 illustrates and

describes their automatic stokers for domestic installations. Heavy industrial stokers will be dealt with in a separate catalogue, at present in preparation, which will be available towards the end of the summer.

From Henry Hope & Sons, also, I receive a copy of a pleasantly illustrated brochure with the title "When You Build." Again this confines its attention to domestic architecture and illustrates a selection of architect-designed houses and blocks of flats. I would like to believe that this brochure will get into the hands of many prospective house purchasers. Primary object of the book, however, is to familiarize architects with some of the many types of Hope metal casements produced for domestic work. The building cost of each of the houses illustrated is given and also the contract price for the supply and fixing of the metal window casements.

Wood Rolling Shutters.—Haskins standard range of wood shutters is described and illustrated in their most recent catalogue—they are of such variety in size and type that they would appear to meet most eventualities, from the smallest

tobacco kiosk to heavy pattern shutters for engine sheds and warehouses. The catalogue is well illustrated with photographs of completed contracts and diagrammatic drawings giving details of mechanical operation and fastening and locking gear. Applications for copies should be addressed to Haskins Ltd., Walthamstow, London, E.17.

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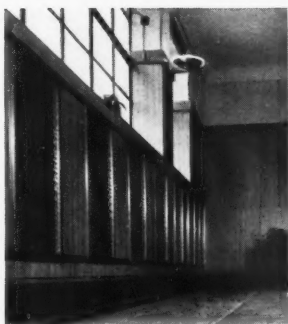
Architect: G. J. W. HASWELL, ESQ., A.R.I.B.A.

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Among the sub-contractors were the following:

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N. F. Ramsay & Co. Ltd. (door furniture), Morton Sundour Fabrics Ltd. (wall coverings), Runnymede Rubber Co. Ltd. (rubber floorings), Cement Marketing Co. Ltd. (Ivory White Cullamix with scraped finish for exterior), F. De Jong & Co. Ltd. (plaster models), Pilkington Bros. Ltd. (glass and decorative glass-work), Frederick Sage & Co. Ltd. (showcases, etc.), Court Studios Ltd. (Dioramas), Autotype Co. Ltd. (photo murals), Alumilite Ltd. (special aluminium processing), Mond Nickel Co. Ltd. (nickel silver for doors and special metal work), London Sand Blast Decorative Glass Works Ltd. (decorative glass-work), O. D. Binger Ltd. (electrical equipment).

Leonard-Thermostatic water mixing valves hold the temperature steady



Courtesy of Woolwich Borough Council

An example of automatic control of water temperature for dental sprays.

Hot water from the heaters passes through a Leonard Valve to the basins at blood heat or thereabout. The control of the temperature is quite automatic and is independent of variation in the supply pressures.

The Valve controls the temperature within a degree or two of the prescribed point with absolute reliability.

Leonard-Thermostatic Valves have been specified by more than a hundred leading Architects. They have been adopted as standard equipment by thirty County Councils and two hundred Municipalities.

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Trade News and Reviews

By BRIAN GRANT



The new G.E.C. headquarters at Shanghai.

Shanghai and Tientsin

CONCERNING the Eastern front two news items of architectural import attracted my attention during the early days of August. The first announced the completion and ceremonial opening of the new G.E.C. offices and showrooms in Shanghai. The new "Magnet House" in Szechuen Road, Shanghai, is a five-storey building housing the public showrooms, offices and stockrooms of The General Electric Company of China, Ltd., and a photo-

graph showing the main elevation is reproduced at the head of these notes.

In recent months tidings from China have been disturbing and grim, photographs in the Press have dealt with demolition rather than construction and it is quite a change to read of something that has been built up not blown up.

May the directors and staff of this new and important G.E.C. office witness a speedy return to peaceful ways of living.

The second item of news concerned a British architect in Tientsin who quite resolutely refused to be "debagged." Here, quoted in full, are the facts as published in the "Evening Standard," on August 9th:—

"Mr. H. McLure Anderson, a British architect in Tientsin, refused today to strip when ordered to do so by a Japanese sentry at the barriers outside the Concession. The sentry finally allowed him to pass."

Well done, Mr. Anderson, more power to your T-square.

Portable Wall-lights

Here is something new from the G.E.C. range of domestic light fittings—a portable bracket for hanging on to the picture rail. The idea has its points—though

perhaps it is just a little late in arrival since the picture rail seems to be fast disappearing from architect-designed houses. The vertical rod of the fitting is 4 feet in length and the lamp arm can be adjusted to any height within the 4 feet, it can also be inverted for use with a drop shade. Fitted with a suitable length of flex it can be plugged into any convenient socket and hung at any point on the picture rail where supplementary lighting might be required.

The rather formal type of fitting illustrated does not appear to be most suitable for its purpose but the basic idea is good and no doubt later designs produced by the G.E.C. will give greater flexibility.

Zinc Weatherstripping

I am unable to find the word "Weather-strip" in either of my two building encyclopaedias. There is a reference to "Weather-bar" and "Water-bar," both of which are described as "patent weather-excluding devices for casements that open inwards—a strip of oak, galvanized iron or copper 1 in. by ½ in., fitted into corresponding grooves in window-cill and frame-cill to prevent water from penetrating." It is not suggested that the "weather-bar" is designed also to exclude draught and to eliminate heat loss.



Picture rail lamp brackets—a new type of portable lighting bracket introduced by the G.E.C.

TRADE AND CRAFT

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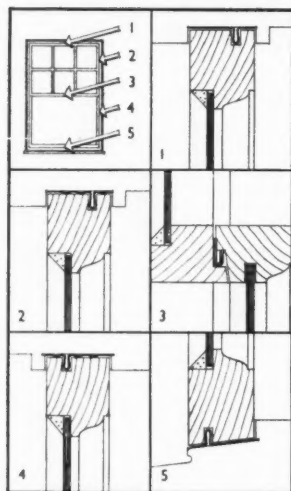
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According to figures given in the Building Research Station's book heat loss through leakages may be anything up to 40 per cent. of the total loss and the American Institute of Heating and Ventilating Engineers declares that approximately 69 cub. ft. of air per hour escapes through every foot of crack in a badly-fitting window in a breeze as low as 10 miles an hour.

By eliminating such heat losses it is estimated that there would be an annual saving of £10 on the fuel bill of a ten-roomed house fitted with central heating.

It seems likely also that efficiently "weatherstripped" windows would help considerably to reduce sound infiltration and to prevent window rattle.

There certainly appears, therefore, to be a good case for weatherstripping; indeed, when you consider the amount of money that is spent in providing insulation to walls and ceilings it is strange that more attention is not paid to the treatment of windows and doors.

All the essential facts about weatherstripping are now available in a small handbook issued by the Zinc Development Association who have standardized a series of zinc sections in order to facilitate the more extensive use of weatherstripping in this country. There are in all some eight different designs and all are illustrated by full-sized sections in the handbook. The sections at the head of this page show a typical application to a sash window and cover most of the sections except for a pair of slightly modified hooks used at the foot of case-window and a comparatively heavy threshold strip for doors. Application of these zinc weatherstrips is very simple and should not prove very costly. The price of the strip itself works out at 6 shillings per hundred feet and present suppliers are Frederick Braby & Co., Ltd., Euston Road, N.W.1; G. A. Harvey & Co., Ltd., Woolwich Road, S.E.7 and Enfield Zinc Products, Park View Road, N.17.

Copies of the weatherstrip handbook may be obtained from the Zinc Development Association, Great Westminster House, Horseferry Road, London, S.W.1.

The "Hotpoint" washing-up machine

The electric dish-washer is almost the last word in kitchen refinement—fortunate is the housewife or housekeeper who has one installed in her kitchen. The smallest and cheapest domestic model at present made is shown in the sketch on page lviii—this is known as Model D.15 and its cost is £60, excluding installation cost. According to the manufacturers it is capable of washing up in one hour all the crockery, glassware, cutlery, etc., used for 100 meals and it seems, therefore, that its capacity is quite a lot in excess of the requirements of the average household.

This is not really a criticism of the washer for it is obviously an advantage to have such capacity available for possible emergencies, but one wonders if by cutting down the capacity it might not be possible to effect a very helpful reduction in manufacturing cost. This is the sort of drudgery saving machine that one would like to see installed in the most modest of households.

In operation the washer is extremely simple. The trays slide through from right to left. The lever, which can be seen projecting from the right side towards the top of the washing cabinet, is set to the "washing" position and retained at that position for a matter of some 30 seconds, the lever is then moved upward to the "rinsing" position and held there for five or six seconds.

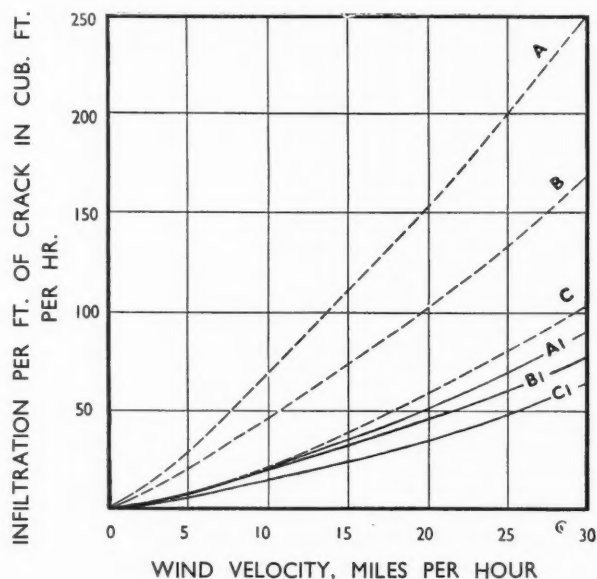
The tray of crockery is now washed, rinsed and in a matter of seconds, owing to the high temperature of the rinsing water, dry. The drawer beneath the washing up cabinet is a scrap tray which collects all solids. The two taps immediately below the scrap tray govern the hot water supply and the lever below the taps opens the waste cock and empties the hot water tank when the washing up is completed.

The Hotpoint brochure contains all particulars of this domestic model and of the larger models made for service in restaurants, hospitals, institutions, etc. (The Hotpoint Electric Appliance Co., Ltd., 24 Newman St., W.1.)

Black out

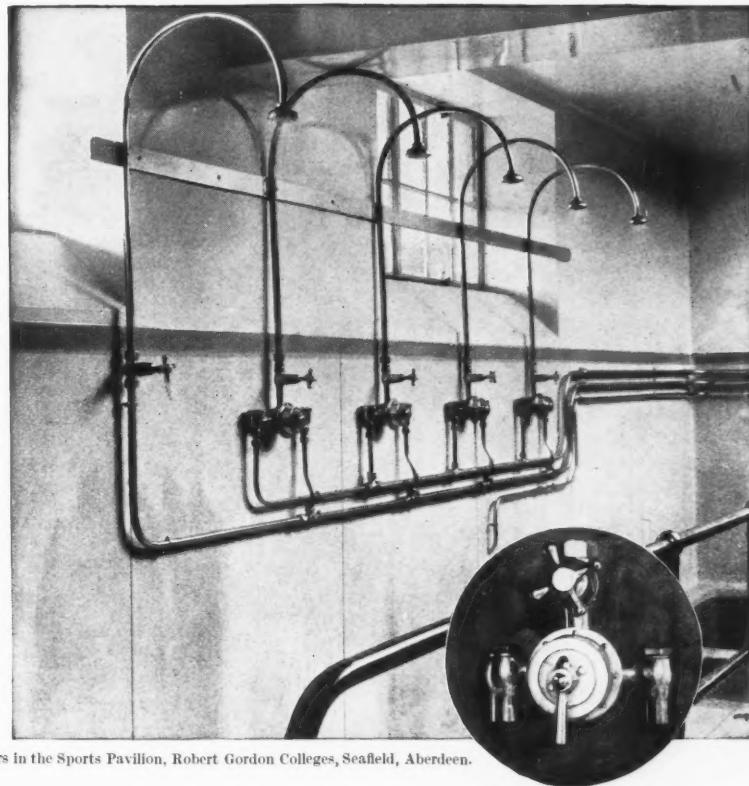
I have to confess that I slept right through the "black out" on August 10th and did not myself witness the efficiency or otherwise of the various light obscuring methods adopted. I like the story, told in a Sunday paper, of the light that burned ever so brightly all night long in a window at the War Office.

As an alternative to black blinds Metropolitan Vickers have evolved a scheme that should receive a welcome. The idea is based on special filters for all lamps and special light blue lacquer on all windows, the resultant "complementary colour" system permitting no artificial internal light to pass outwards through the window. During the daytime sufficient daylight is admitted through the lacquered windows for normal working purposes. Sodium lamps are used with a detachable tinted vacuum jacket. The reduction of light emitted is approximately 40 per cent., but as the output



INFILTRATION OF AIR THROUGH WINDOWS
A Average wood sash window, $\frac{3}{8}$ in. crack. A1 The same weatherstripped. B Average metal sash window. B1 The same weatherstripped. C Well-fitted sash window, $\frac{1}{16}$ in. crack. C1 The same weatherstripped.

As steady as an Air Raid Warden



Leonard Valves on Showers in the Sports Pavilion, Robert Gordon Colleges, Seafeld, Aberdeen.

It is not only in elegant places like University Sports Pavilions that Leonard Thermostatic Valves are used, but in holiday camps, National camps, militia camps, etc., and wherever baths are needed at low cost.

The shower spray is a wonderful bath but has never come into its own because it would not stay put. Hot and cold, hot and cold: everything by turns but nothing long. Without a Thermostat a shower spray is not so much a toilet fixture as a pressure indicator letting the bather know on his bare

skin how pressures are rising or falling in the supply lines. A Leonard Thermostatic Valve will deliver water only at the temperature for which it has been set. It takes the kitten right out of the shower and makes it as responsible as an A.R.P. warden. It takes the waste out of it too, and the risk of scalding.



Of course showers are not the only thing. Where you have a decent head of water you can send the hot water from the boiler round the fixtures at 200° Fah. or anything short of steam raising.

At the point of use you can reduce it to 120° Fah. or what you will by means of a Leonard Thermostatic Valve. Think how that increases the capacity of your boiler; how it reduces costs of pipe line, equipment, insulation. Let no man say a word against the way the holiday camps, militia camps, etc., are being equipped. Starting with Prestatyn de luxe, a large proportion of them are to be Leonard equipped. Leonard Thermostatic Valves have been specified by more than a hundred leading Architects. They have been adopted as standard equipment by thirty County Councils and two hundred Municipalities.



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TRADE AND CRAFT

from sodium lamps is considerably greater than from gas filled lamps the lighting cost will not be increased to any great extent.

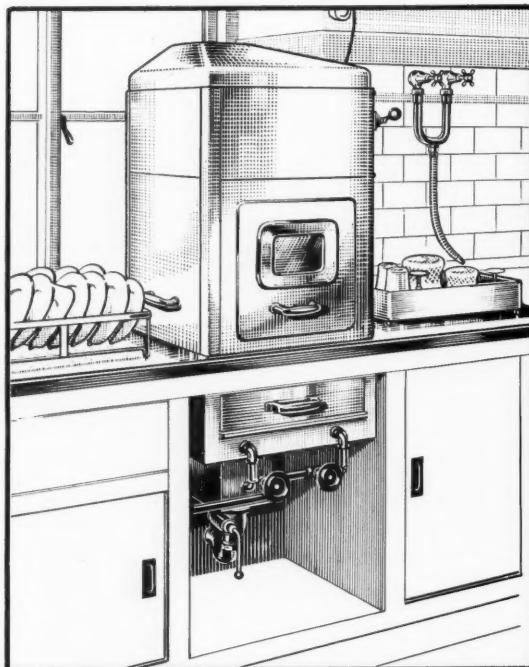
Should you be intending to adopt this convenient form of "black-out" precaution it should be noted that the lacquer and filters are arranged to work *only* with the light from sodium lamps and that there should be no other light sources, nor should any processes such as welding be carried on during precautionary periods.

All details and advice can be got from Metropolitan Vickers Electrical Co., Ltd., 1 Kingsway, London, W.C.2.

Camouflage at Leicester

We have heard amazingly little about camouflage, and though I have recently covered a good deal of ground in the southern and midland counties, I have seen little evidence of camouflage activity. Now that the Stationery Office have issued A.R.P. handbook No. 11 entitled *Camouflage of Large Installations* we may hear and see rather more about it, and those architects who have also a knowledge of flying, photography and scenic design may be called in to render their services.

In an earlier page in this number of THE ARCHITECTURAL REVIEW there is a photograph of the cooling towers at the central generating station of the Leicester City Electricity Service—here the camouflage design and the tone and colour values have been prepared so



The domestic model of the "Hotpoint" washing-up machine—a labour saver indeed.

that they match the trees and fields which surround the station. Oil bound water paint manufactured by Robert Kearsley & Company of Ripon was used and the camouflage artist was Mr. Ernest Townsend of Derby.

Lancaster Washable Wall-covering

James Williamson & Son of Lancaster have just issued a useful handbook and sample brochure describing their "Lion Brand" washable wall coverings.

Lancaster cloth is a muslin base impregnated with a linseed oil compound and the finish given may be matt or glossy according to choice. The method of application is almost identical with that of wall paper except that the paste is applied to the wall and not to the cloth; I notice, also, that the manufacturers recommend the use of a special adhesive paste, though they state that any good brand of paste may be used.

The range of colours and patterns available is extensive and a selection of samples is included in the brochure, copies of which may be obtained from the company's head office at Lancaster or from any of their branch offices.

Heat Economy

The Coal Utilisation Council have issued a small technical handbook on the subject of heat economy in hospitals and institutions.

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The different chapters deal with—fuel and fuel costs; typical solid fuel fired installations; subsidiary equipment; modernizing existing installations; and the conservation of heat. The first chapter contains a tabled analysis and comparison of fuel costs with various fuels and a further table gives the average annual consumption of fuel per head in asylums, hospitals and sanatoria.

Application for copies of the handbook should be addressed to the Coal Utilisation Council at Grosvenor Gardens House, London, S.W.1, or to any of the Council's branch offices.

A.R.P.—emergency repair system for water mains

The July-August number of the *Glenfield Gazette* contains some further notes on the sort of emergency repair work that would almost certainly have to be put into operation should war eventuate. The system of repair described has been designed by Glenfield & Kennedy, engineers and was demonstrated during May before representatives of the Ministry of Health, the Building Research Station and a number of water engineers.

I imagine there will be many architects who will like to have information of this sort available in their offices and would suggest that they apply to Messrs. Glenfield & Kennedy, Kilmarnock, Scotland, for descriptive details and illustrations.

The Buildings Illustrated

House at Esher, Surrey.

Architects: Patrick Gwynne and Wells Coates, F.R.I.B.A.

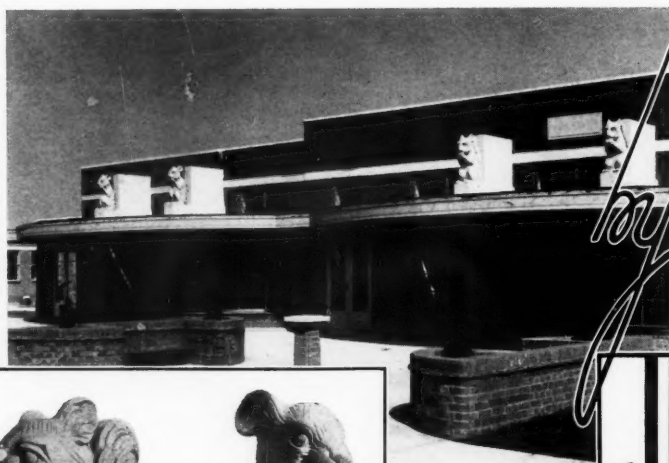
The general contractors and contractors for the reinforced concrete work were F. Bradford & Co. Ltd. Among the sub-contractors and craftsmen were the following:—Prestige & Co. Ltd. (general building work), Leslie Bilsby Ltd. (interior decoration, joinery, furniture and flush doors), Francois Cementation Co. Ltd. (R.C. piles), Franks Harris Bros. (excavation and main drives, etc.), Thomas Pascall & Sons Ltd. (facing bricks), Ruberoid Co. Ltd. (partitions, foamed slag blocks), Honeywill & Stein Ltd. (Heraklith partitions), James Clark & Son Ltd. (glass, including Thermolux), Pilkington Bros. Ltd. (glass bricks and dome lights), Hollis Bros. & Co. Ltd. (wood-block flooring), George Stephenson & Co. Ltd. (patent flooring—cork tiles), Matthew Hall & Co. Ltd. (central heating and plumbing), Urquharts (1926) Ltd. (oil firing), Moffat Ltd. (Moffat cookers), Hotpoint Electric Appliance Co. Ltd. (electric dish washer), Bratt Colbran Ltd. (fire interior in L.R.), T. Clarke & Co. Ltd. (electrical work), Troughton & Young

Ltd., Best & Lloyd Ltd., H.M.V. Household Appliances (electric fittings), Maple & Co. Ltd. (Maple striplight), E. K. Cole Ltd. (Thermovent heaters), British Knappen Ltd., Greenwood's Ventilating Co. Ltd. (ventilation), Fairways Ltd., John Bolding & Sons Ltd. (sanitary fittings), Oscar Kanter Ltd., Taylor Pearce & Co. Ltd., James Gibbons Ltd. (door furniture), J. D. Beardmore & Co. Ltd. (door furniture, metalwork), Tuke & Bell Ltd. (sewage disposal), Williams & Williams Ltd. (metal windows), D. Burkle & Son Ltd. (wood windows, joinery), Rota Products Ltd. (window gear to living-room), Joseph Avery & Co. Ltd. (sunblinds), Fairways Ltd. (Hydrokeen plaster), Plastering Ltd. (plaster work), Veneercraft Ltd. (doors), John Stubbs & Sons Ltd. (Levanto marble fireplace surround), Ramsden's Ltd. (terrazzo), Richards Tiles Ltd., Hall & Co. Ltd. (tiling), Edinburgh Weavers Ltd., Donald Bros. Ltd., Allan Walton Ltd., Marion Dorn, Ltd., Gordon Russell Ltd. (textiles), A. Sanderson & Sons Ltd. (Japanese grass cloth), Charles Humish Ltd., Thonet Bros. Ltd., Isokon Furniture Co. (furniture), Smith's English Clocks Ltd. (clocks), A. Johnson & Co. Ltd. (stainless steel sink), E.M.G. Handmade Gramophones Ltd. (radio), Stie B. Ltd. (external paintwork), E. Hill Aldam Ltd. (sliding door tracks), Armstrong Cork Co. Ltd. (cork insulation), Newalls Insulation Co. Ltd. (Paxtiles, insulation), J. C. Birch Ltd. ("Sylenz" floor clips).

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Flats in Bayswater.

Architects: Howard Leicester and Partners, F./A.R.I.B.A.

The general contractors were Demolition & Construction Co. Ltd. Among the sub-contractors and craftsmen were the following:—Highways Construction Co. Ltd. (asphalt), W. T. Lamb & Sons (bricks), Atlas Stone Co. Ltd. (artificial stone), Horseley Bridge & Thomas Pig-gott Ltd. (structural steel), Diespeker & Co. (fireproof construction), Ramsdens (London), Ltd., Camden Tile & Mosaic Co. Ltd. (tiles), J. H. Sankey & Son, Ltd. (partitions), Aygee Ltd. (glass), Hills Patent Glazing Co. Ltd. (patent glazing), Arthur Scull & Son, Ltd. (central heating, ventilation), W. N. Froy & Sons Ltd. (grates), Gas, Light & Coke Co. Ltd. (gas fixtures, gasfitting), Colston Electrical Co. Ltd. (electric wiring, electric light fixtures, bells, electric heating), John Bolding & Sons Ltd. (sanitary fittings), Craigpark Electric Cable Co. (cables), Baldwins (Birmingham) Ltd. (door furniture), Williams & Williams Ltd. (casements), F. A. Norris & Co. Ltd. (folding gates, iron staircases), W. A. Telling & Sons (plaster, decorative plaster), Garton & Thorne Ltd. (metalwork), Palorit Paints Ltd. (artificial stone paint), John Stubbs (Marble & Quarzite) Ltd. (marble), Pyrotex Ltd. (lift wiring cable installation), Anti-Static Ltd. (radio), Allensor Ltd. (special fitted cupboards), Marryatt

& Scott Ltd. (lifts), Tett Bros. Ltd. (water softening plant), Holroyd (Glassware and Lighting) Ltd. (lighting fittings), Clark, Hunt & Co. Ltd. (tubular railings), automatic Sprinklers Ltd. (sprinklers), Hewitt Engineering Co. (boilers), P. H. Barker & Son Ltd. (joinery), Fromow of Chiswick (shrubs and trees), Green Bros. (kitchen fittings), Bull Super Silent Motors by Bull Motors (Branch of E. R. & F. Turner Ltd.).

Chapel of Memory at Golders Green.

Architects: Mitchell and Bridgwater.

Assistants: E. G. Mambery and L. W. Aked.

Quantity Surveyor: R. W. Ord.

The general contractors were Pitchers Ltd. Among the sub-contractors and craftsmen were the following:—Lawford Asphalte Co. Ltd. (asphalt), F. Bradford & Co. Ltd. (reinforced concrete floors and staircase), Finnis & Ruault (bricks, tiles), Pilkington Bros. Ltd. (glass), J. Whitehead & Sons Ltd. (marble flooring), Cork Insulation Co. Ltd. (cork floor), Richard Crittall & Co. Ltd. (low temperature panel warming), A. H. Cornwall Ltd. (electric wiring), Troughton & Young Ltd. (electric light fixtures), John Bolding &

Sons Ltd. (sanitary fittings), Wing & Webb Ltd. (door furniture), Crittall Manufacturing Co. Ltd. (casements), C. A. & A. W. Haward (iron staircases), Heal & Son Ltd. (altar curtain, seat squabs and cushions), H. H. Martyn & Co. Ltd. (altar, pews, Book of Memory table), Eric Munday Ltd. (lettering on all doors), Thomas Ash & Co. Ltd. (flower chute in flower rooms), Omar Ramsden (cross and candlesticks).

Kindergarten School, nr. Northwich, Cheshire.

Architects: J. L. Martin and Sadie Speight, A.A.R.I.B.A.

The general contractors were E. B. Jones & Rawlinson Ltd. Among the sub-contractors and craftsmen were the following:—Turners Asbestos Cement Co. (wall finishes, internal and external), D. Anderson & Son Ltd. (special roofing), Terradura Flooring Co. Ltd. (Terradura flooring), A. J. Young Ltd. (central heating and plumbing), Ideal Boilers & Radiators Ltd. (ideal boilers), Oswald Hollmann (electric light fixtures), Dryad Metal Works (door furniture), Crittall Manufacturing Co. Ltd. (metal casements), P. C. Henderson Ltd. (sliding tracks).

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Since architects are finding that aluminium claims an ever increasing amount of their attention, it is hoped that these sheets, prepared by a highly qualified architect, will simplify their task by making available all relevant data in its most accessible form. If you would like these information sheets for your files kindly fill in and post the form below.

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Trade News and Reviews

By HENRY MORETON

Electric Organs

HAVE any of you heard the new electric organs which are going to revolutionize the old accepted principles of organ building? By electric organs I don't mean those gaudy monstrosities blazing with coloured lights that suddenly pop up out of the orchestra pit in cinemas and goad the audience to frenzy with complicated grunts and wails (not that I dislike the cinema organ, but only the way in which the average organist abuses it). The cinema organ is merely a pipe organ operated electrically. The type I am referring to is entirely electric. It has no pipes at all, the sound being produced purely synthetically.

To understand at all how it works, one must first realize that a note struck, for instance, on the piano, is not just a single note, but is, in fact, a combination of many notes, though the ordinary ear does not analyze it as such. If I play middle C, for example, I get not only that fundamental note, but in addition various harmonics, some above and some below, and it is the harmonics that give character to the sound. If I play the same note on the violin I get the same fundamental note but an entirely different combination of harmonics. That is why the violin and the piano sound entirely different, though they are playing the same note.

The principle behind all electric organs is to produce electrically a full range of pure notes (i.e. without harmonics), and by mixing cocktails, as it were, of different

notes to reproduce any desired tone. The tone builder takes his middle C, for example, adds a dash of the second harmonic, a good chunk of the third, a bit of the next, and so on, and thus builds up the tone he wants whether it be reed or trumpet or the like.

As far as actual playing is concerned, the controls are the same as those of the ordinary organ, and they sound exactly like ordinary or, rather, like extremely good organs, and the resources of tone are greater than those of any but the very largest, multi-manual affairs with stops all over the place.

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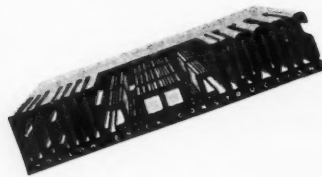
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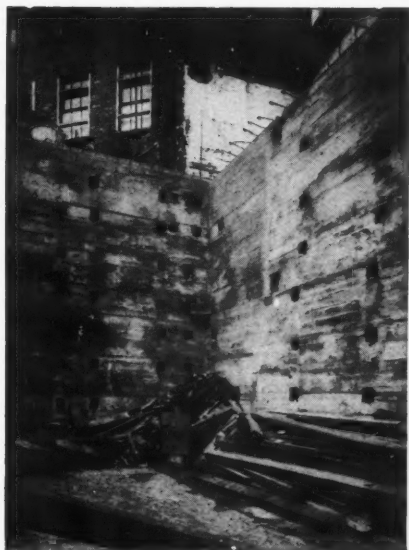
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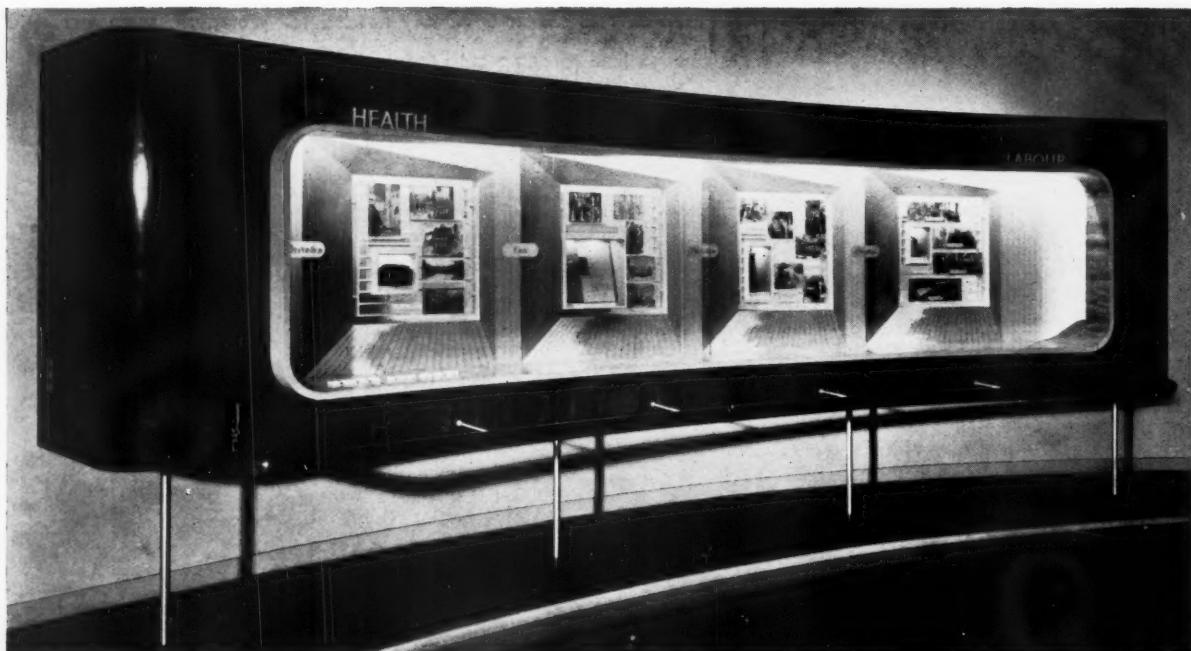
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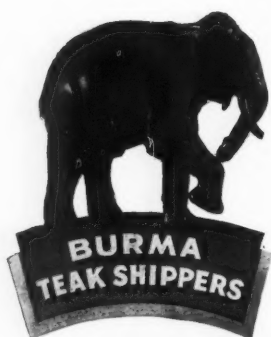


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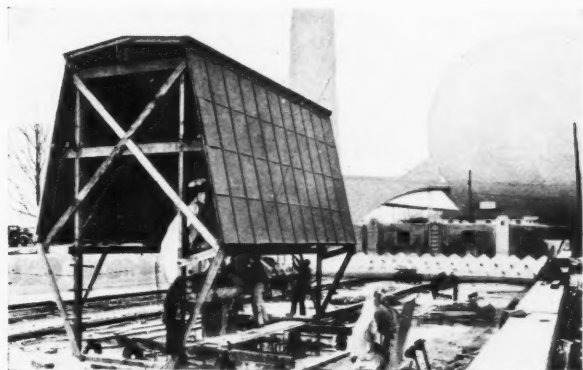


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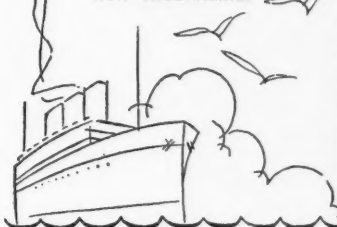
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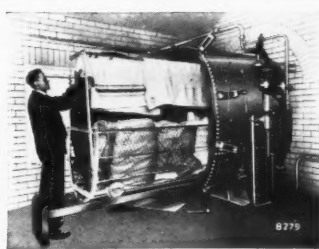
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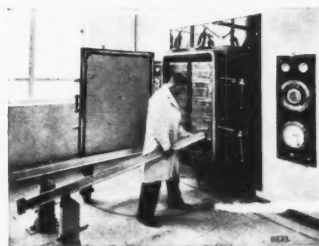
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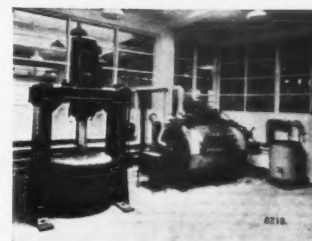


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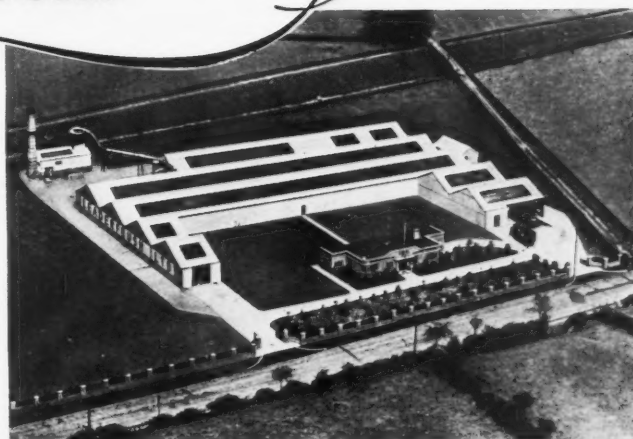
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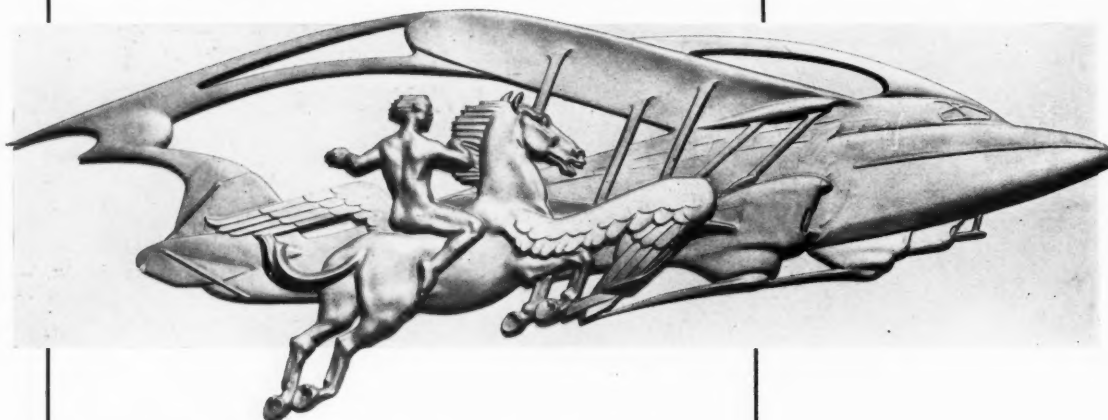


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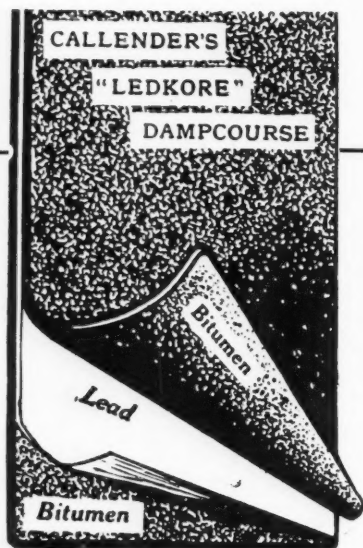
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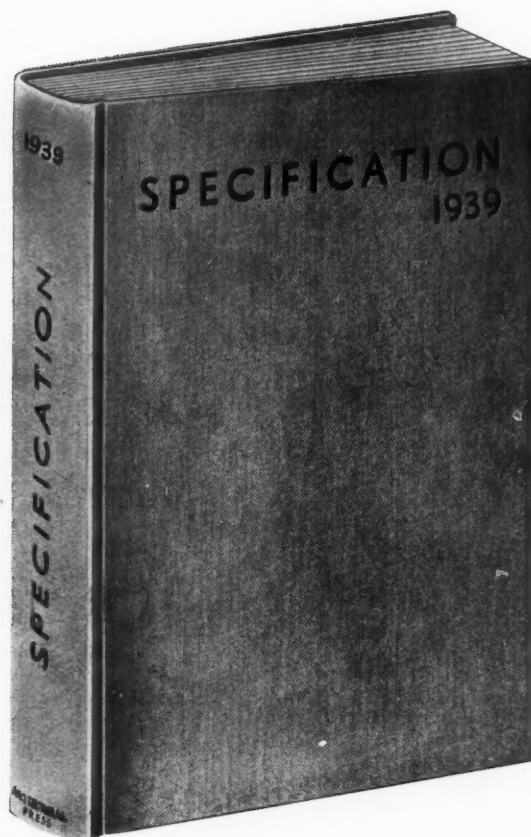
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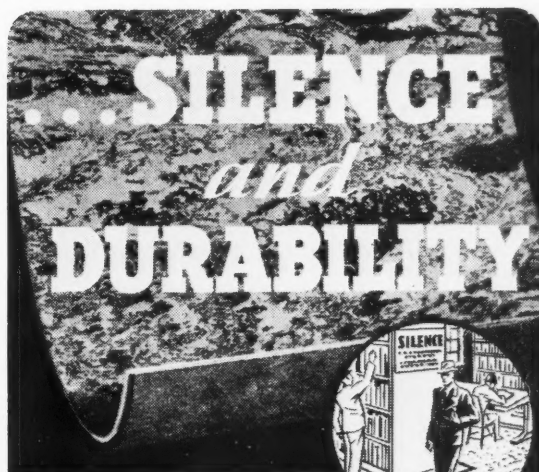
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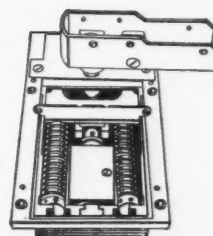
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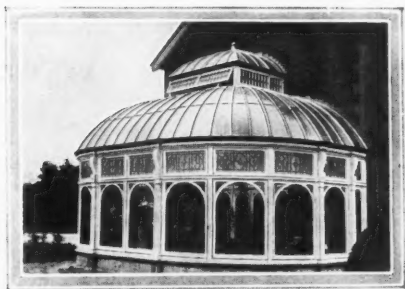
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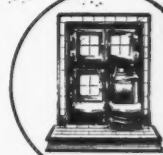
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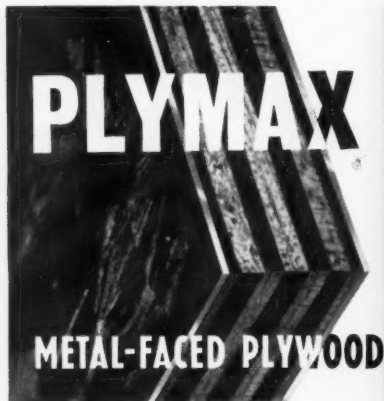
GLASGOW

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A N D
V E N E E R

The advertisements in the following pages
have been grouped together for the
greater convenience of the reader.

They form a useful and well illustrated
extension to the editorial supplement on
Plywood published in this number.

V E N E S T A P R O D U C T S

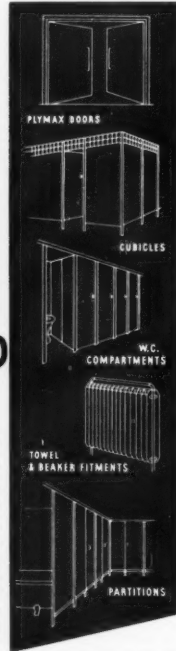


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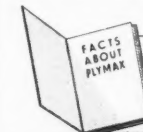


Send for our booklet on Plymax Unit Construction

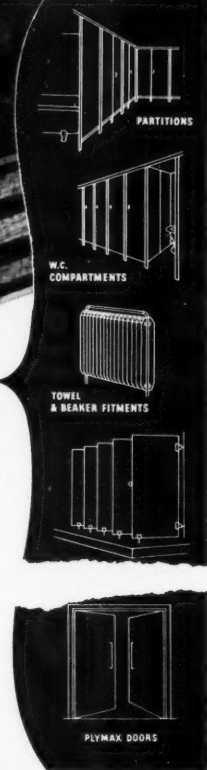


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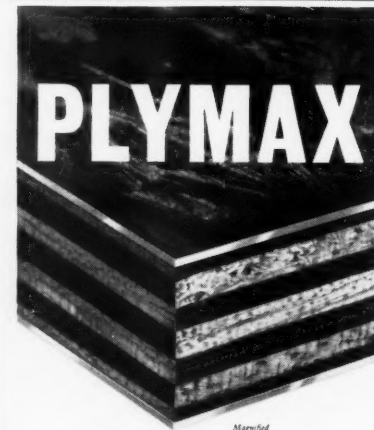
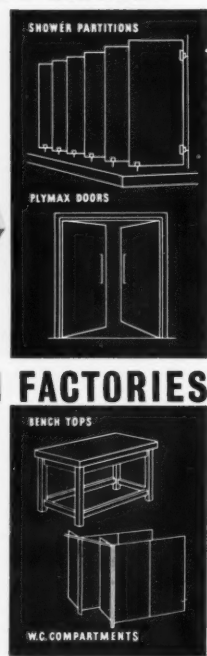
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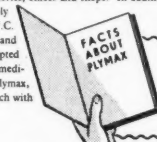
PLYMAX FOR A.R.P. Plymax Doors for airlocks and gas-tight rooms cannot warp. Plymax linings for decontamination centres can be quickly hosed down, and the rigidity and flatness of the sheets simplifies the construction of gas-tight joints.



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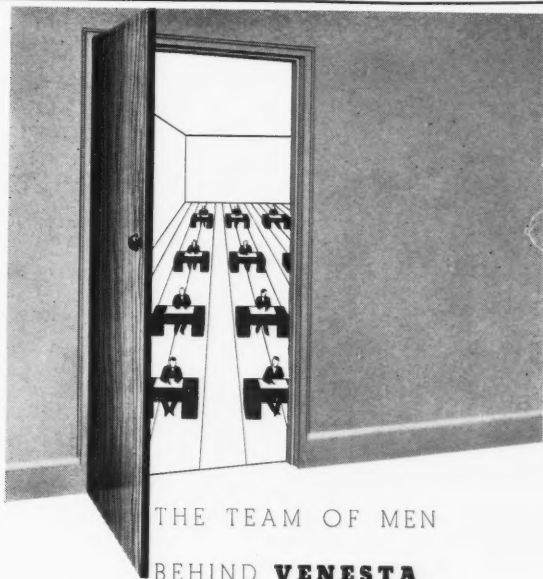
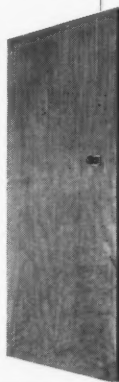
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FLUSH DOORS



THE TEAM OF MEN

BEHIND **VENESTA**

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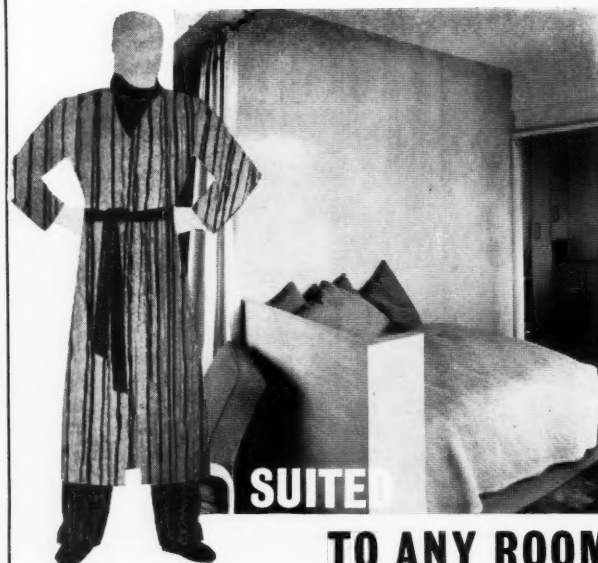


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SUITED TO ANY ROOM

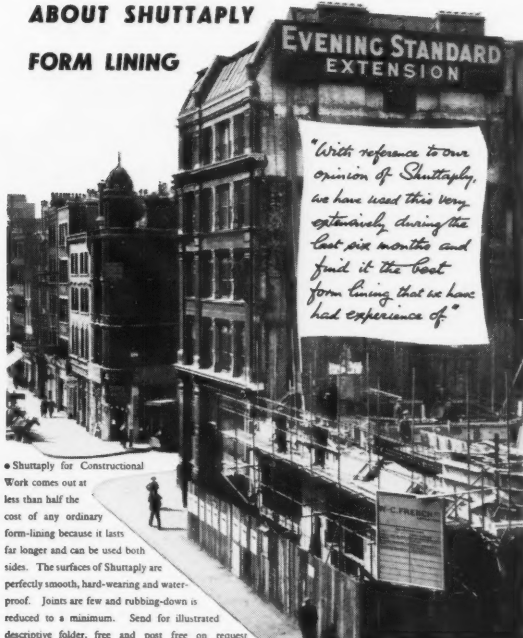
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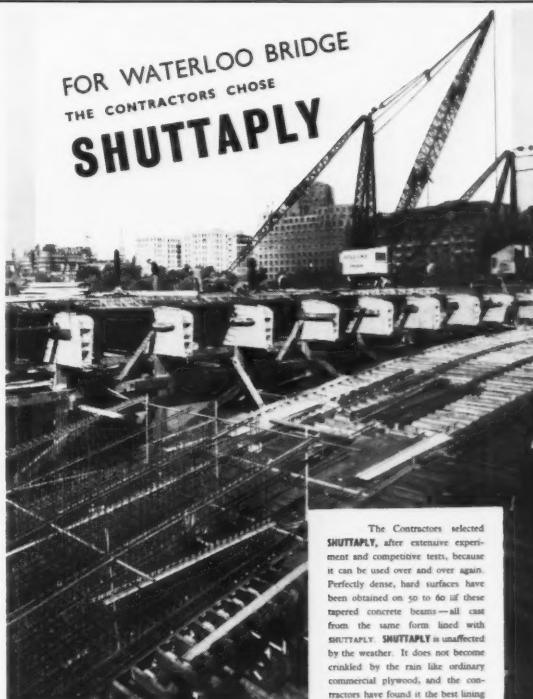
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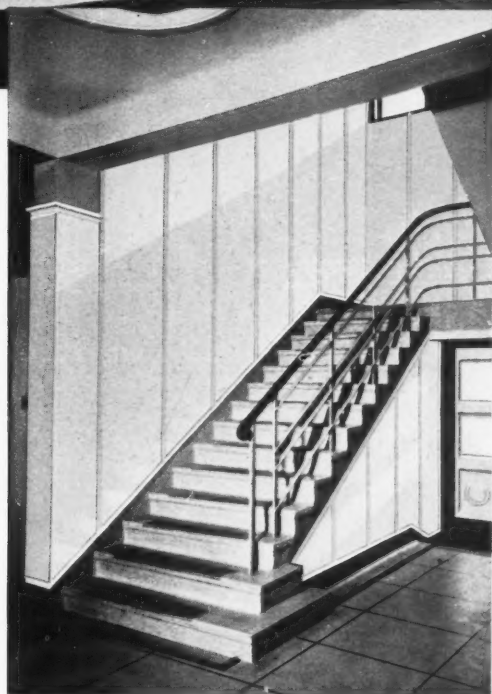
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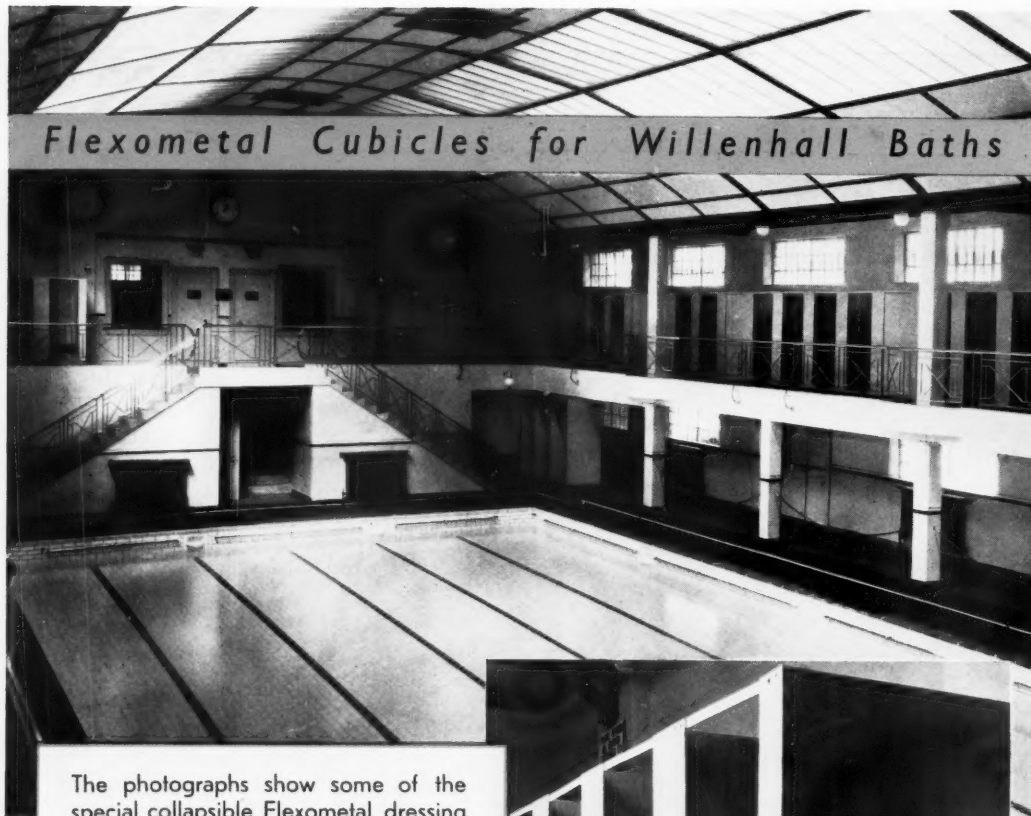
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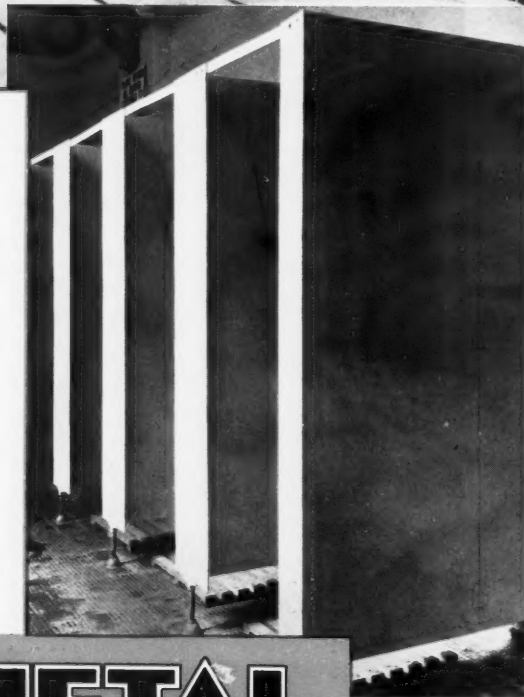
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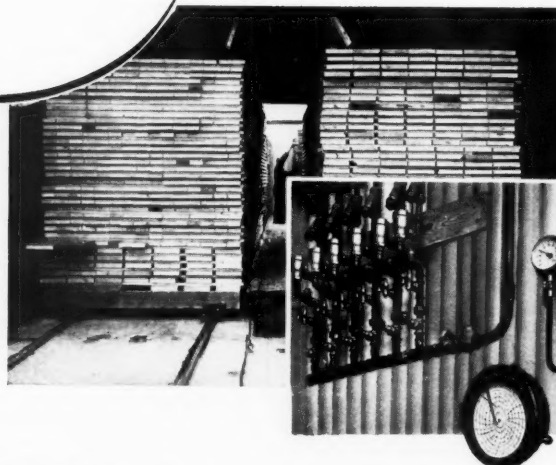
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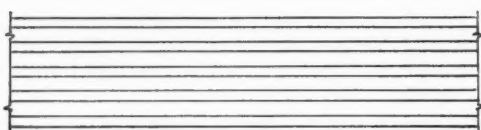
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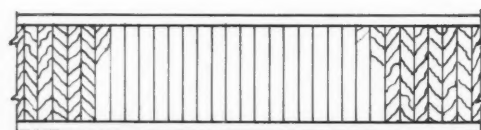


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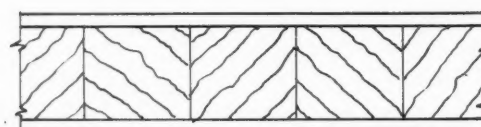
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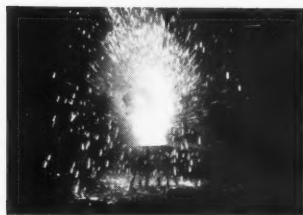
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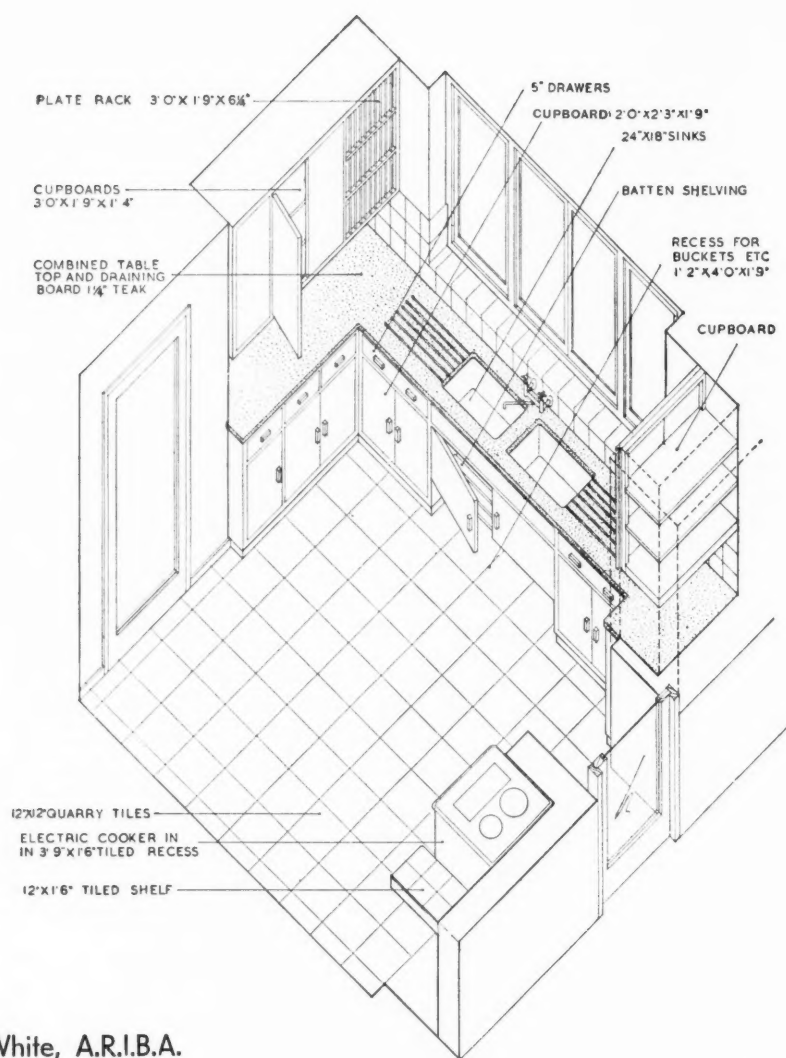
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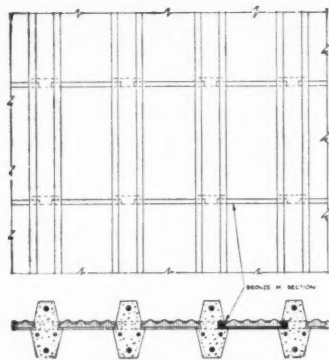
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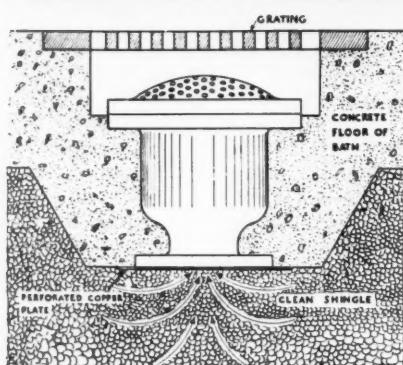
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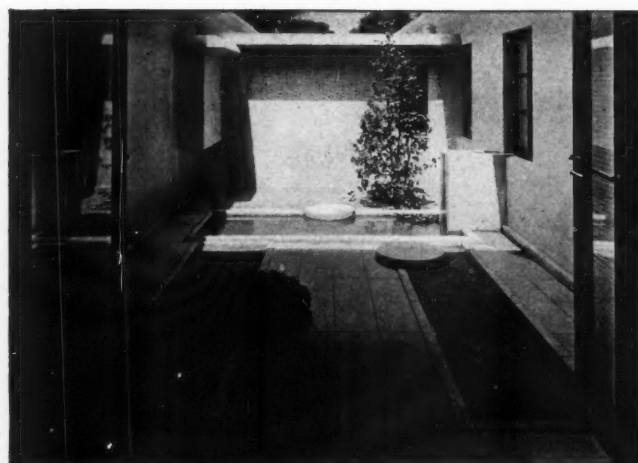
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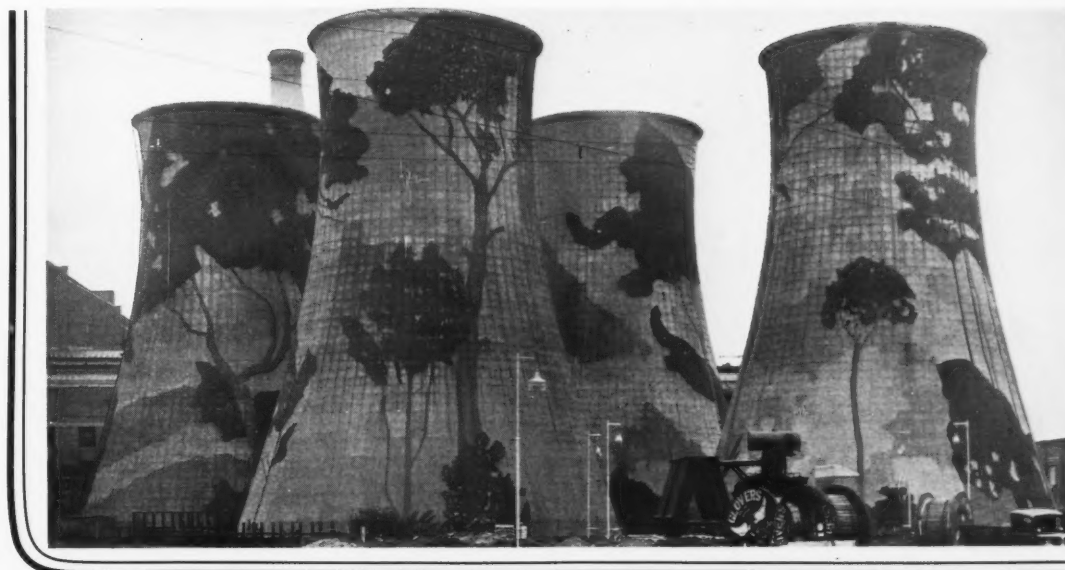
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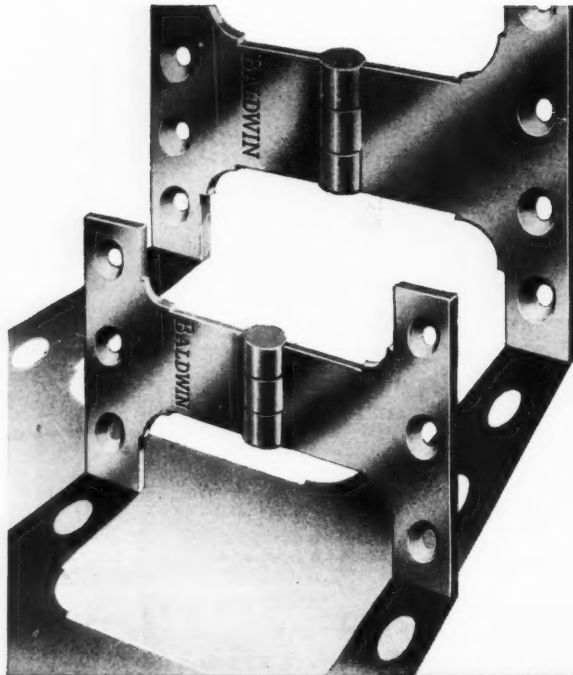
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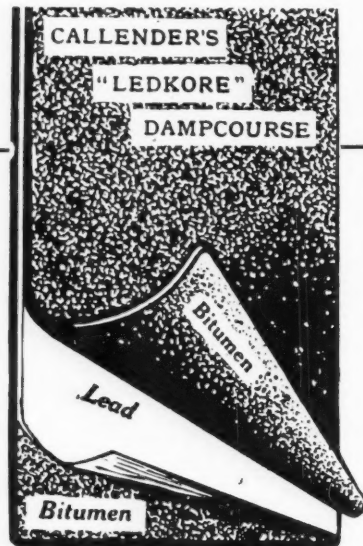
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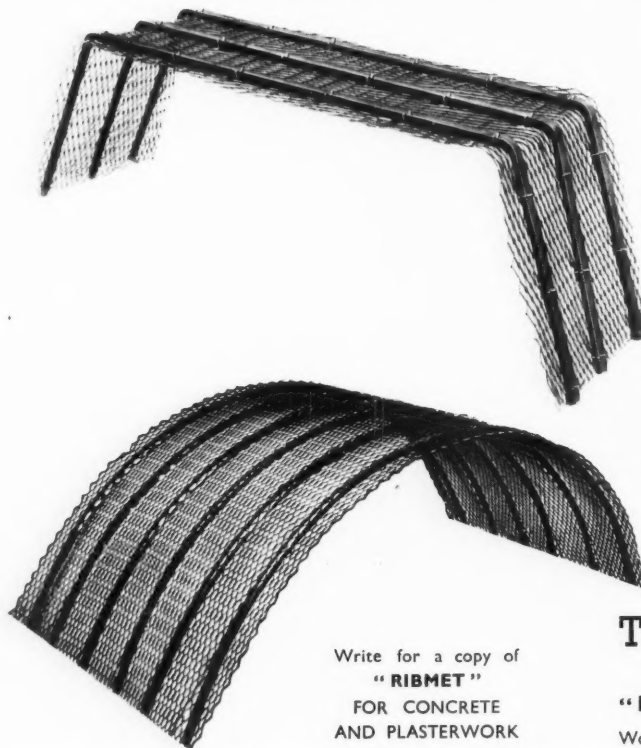
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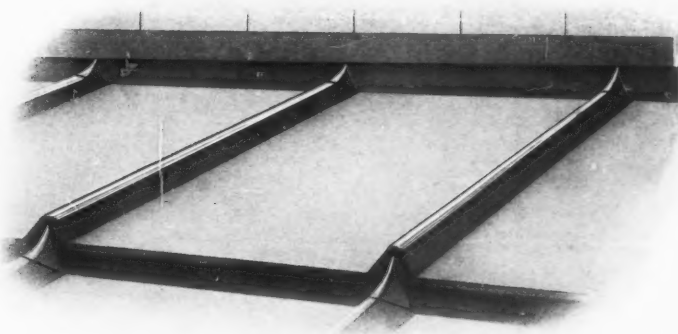
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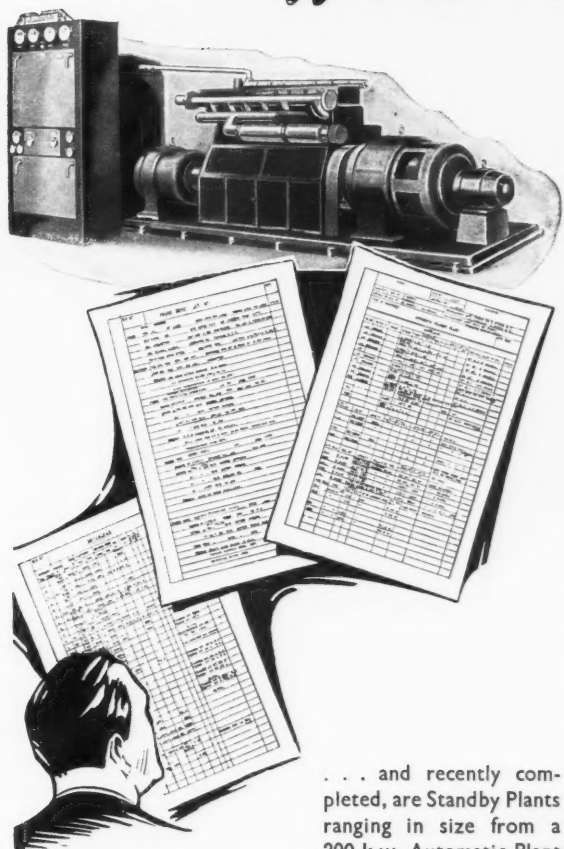
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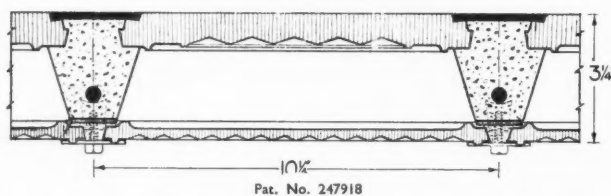


Southfields Library

Architects :
Symington, Prince & Pike

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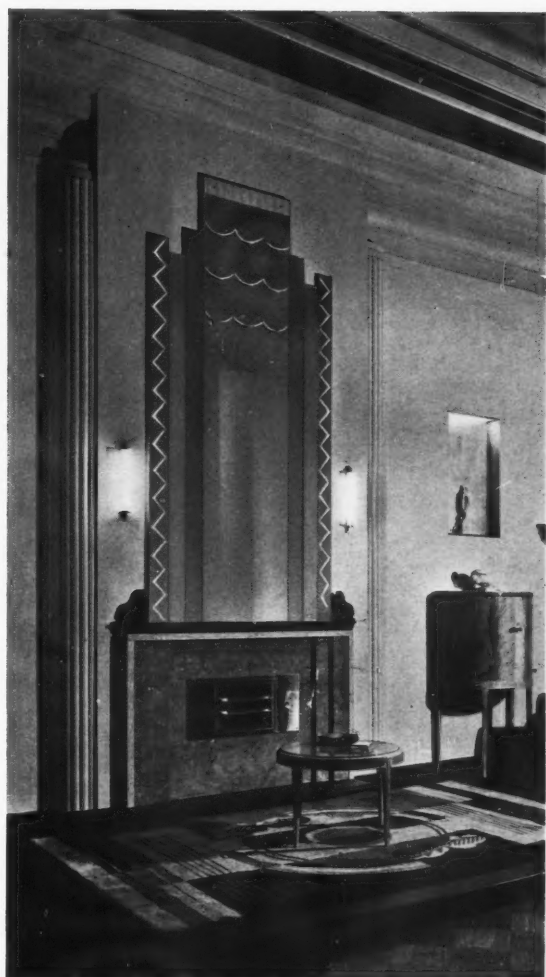
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parts, but then I always send my plans out! At all events, I thoroughly enjoyed the photograph of an arc flame under magnetic influence.

The British Rubber Publicity Association

19, Fenchurch Street, E.C.3.

The international scheme for the regulation of rubber envisaged the formation of an organization in Great Britain to conduct research into finding new uses for rubber and propaganda for its existing applications. The British Rubber Publicity Association announces that it has taken over the activities formerly carried out by the Rubber Growers' Association over a long period of years.

As is usual with trade associations, it has itself no manufacturing or trading facilities but exists to promote the interests of the industry and to give help to users of rubber.

The Association is taking the very sensible course of appointing an architect as consultant to deal with problems connected with the building industry. His services will be freely available to all architects.

I am strongly in favour of these Associations, which, as far as my own experience goes, have proved to be most

helpful both in the case of giving individual advice and in the wider field of general research.

To quote two typical cases of the work done by such Associations:

The British Steelwork Association has just opened a new showroom designed by Cameron Kirby at Steel House, Tothill Street, S.W.1. At present an Exhibition of the various types of steel A.R.P. shelters is being held and technical information and assistance is available.

I have also received from Clay Products Technical Bureau of Great Britain two practical and useful brochures—Bulletin No. A.R.P. 2 on Brick Shelters, containing a number of typical plans with full details of costs; and Bulletin No. S.G. 2 on Sewage and Drainage, a dull subject but one on which most of us could do with a little more information.

My friend Brian Grant, who has delegated to me this month the duty of writing these notes, is very fond of throwing bricks at manufacturers for sending out uninformative pieces of sales blah. I am beginning to wonder if his perpetual grumbling is beginning to take effect. At all events, most of the booklets that have dropped into my letterbox during the last few weeks have at the worst been worth looking at and some of them I am keeping, though knowing my system of filing I am inclined to doubt whether I shall succeed in finding them again if I want them.

Pressed Steel

For instance, the Morris Singer Company (Ferry Lane Works, Forest Road, E. 17) have produced a booklet on their pressed steel door frames. The advantages of steel frames are by now well known and no space is wasted on elaborating them. Instead, an adequate number of full size details is given showing the range of sections to suit different door or wall thicknesses. Then follow brief fixing instructions and the method of specification. No wasted words, but quite a lot of helpful information.

Lighting Fittings

Messrs. Best & Lloyd, Ltd. (Handsworth, Birmingham), have sent me particulars of some pleasant additions to their range of lighting fittings. I liked best some pendants designed by Eric Paton. The illustrations show the three types available. Prices vary from £3 14s. to £4 7s., according to size and finish.

The same firm also send me details of a new telescopic reflector designed to prevent the direct rays from electric lamps throwing illumination on to the windows of a room.

The shade is made of spun aluminium finished in black or ivory outside with the internal face of the telescopic sections in black and the dispersive reflector in white.

To lower the reflector the telescopic section in the top cap is turned until projections on the top cap pass through slots in the telescopic section.

Various sizes are standardized in accordance with the dimensions given in the accompanying table. Prices vary

No.	Watts	Dimensions in Inches		
		A	B	C
A.R.P. 1	60	8½	6½	10½
A.R.P. 2	100	10	7½	12½
A.R.P. 3	150	10	8	13
A.R.P. 4	200	12	9½	15½

from 10s. 6d. upwards, and special quotations are made for quantities.

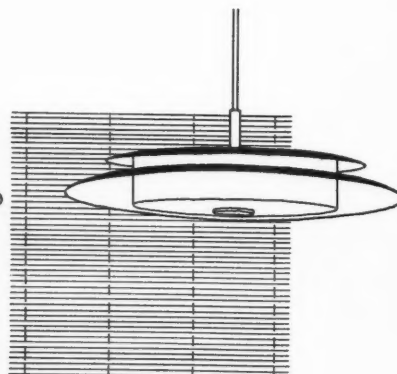
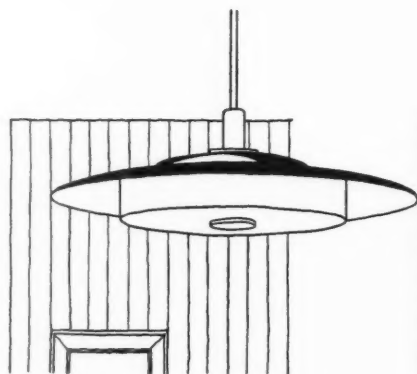
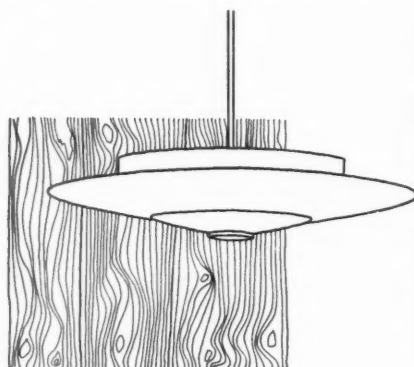
Particulars may be obtained from the company's head office at Handsworth, Birmingham, or from their London office, 40 Great Marlborough Street, London, W.1.

Development Associations

All the Development Associations are, according to present information, continuing to operate but the nature of their work will almost certainly be adjusted to meet present conditions and requirements. The information bureaux of the various Associations will perform a national service and I understand that already their inquiries departments are working at high pressure.

The Zinc Development Association and the Cement and Concrete Association have moved their headquarters to Oxford and there are proposals that all the Development Associations should be centred there.

Definite information should be



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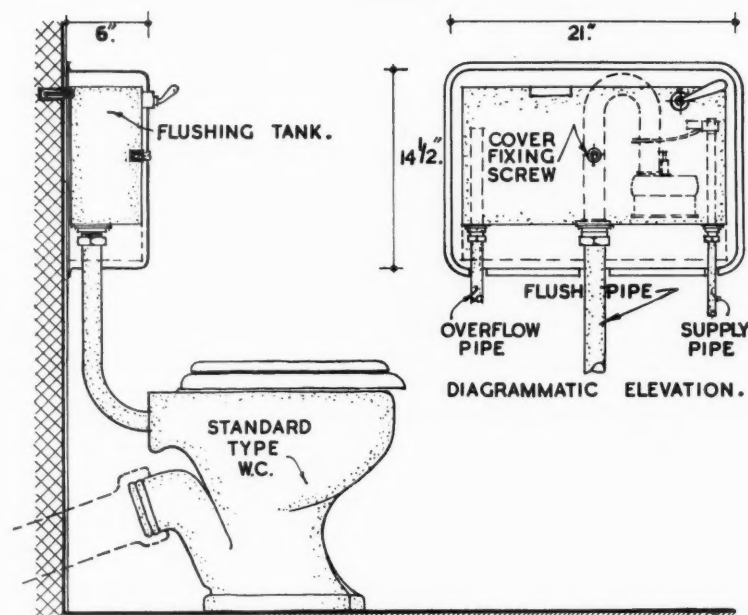
TRADE AND CRAFT

available quite shortly and those wishing to make inquiries are invited to telephone the Architectural Press at Vigilant 5762.

A New Low Level Cistern

The illustration on this page shows the low level flushing cistern recently introduced by Messrs. Fordham Pressings, Ltd., Melbourne Works, Dudley Road, Wolverhampton. Its clean simple lines earn full marks. In construction it consists of two parts, the inner cistern of welded steel and the outer panel cover of seamless steel, vitreous enamelled in any specified colour. Two, two and a half and three gallon capacities are standardized, the prices being 60s., 61s. 6d. and 63s. The projection from the wall is only 6", which is handy in these days of minimum planning. Fixing is by means of two holes in the back of the inner unit, the outer covering being slipped on afterwards and secured by a single screw with a slot wide enough to be turned by a coin if inspection of the working parts is desired.

The same firm also produces a range of high level Flushing Troughs. Individual sections run up to a maximum length of 8', but further sections can readily be added to suit large installations. Full details of both types can be found on Information Sheet No. 725 (Architects' Journal Library of Planned Information).



The British Aluminium Co. Ltd. have removed their Head Office to the Raven Hotel, Castle Street, Shrewsbury, Salop. Telephone: Shrewsbury 4451. Telegrams: "Cryolite, Shrewsbury." All of the Company's branch office addresses remain unchanged. National requirements have first call upon the resources of the Company; in connection with these and

other requirements, the Company hold their Technical Staff and Representatives at the service of Industry.

Building Industries Services are still in London but have moved from Ebury Street to Holborn. Telephone No.: Holborn 7666.

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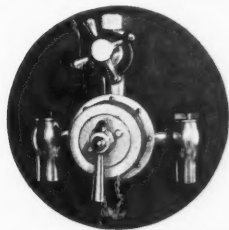
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Range of wash basins in the Gents' Toilet, Grosvenor Hotel, Manchester.



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Courtesy of Messrs. Spiller's Ltd., Cardiff Mills. Wash Fountains supplied from two Leonard Valves.

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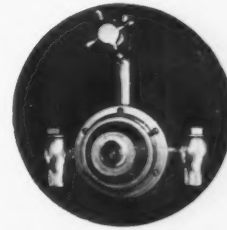
Leonard Valves are coming into use more widely every day. In factories and schools for showers, ranges of hand-basins and washing troughs, circular fountains.

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61-44

TRADE AND CRAFT

The Buildings Illustrated

New Nurses' Home, Macclesfield.

Architect : Frederick Gibberd, L.R.I.B.A., A.I.A.A.

The general contractors were Cooper Bros. Among the sub-contractors and craftsmen were the following:—Caxton Floors, Ltd. (reinforced concrete work); John Bolding and Sons, Ltd. (sanitary equipment); E. Hill Aldam and Co., Ltd. (sliding door gear); Cork Insulation Co., Ltd. (cork floors); William Ryder, Ltd. (bathroom equipment); MacAndrews & Forbes, Ltd. (doors); R. I. W. Protective Products, Ltd. (waterproof painting); Garton and Thorne, Ltd. (staircase balustrades); William Sugg and Co., Ltd. (gas incinerator); Frederick Braby and Co., Ltd. (cloak room fittings); Holophane, Ltd. (flush ceiling lighting fittings); Paul and Moore, Ltd. (ironmongery); Ragusa Asphalte Paving Co., Ltd. (asphalt roofing); Williams & Williams, Ltd. (metal windows); Morris Warming Co., Ltd. (heating installation); British Trane Co., Ltd. (Vectair radiators); T. and R. Williamson, Ltd. (paint and distemper); Joseph Freeman, Sons &

Co., Ltd. (concrete paint); Tentest Fibre Board, Co., Ltd. (insulating board).

House at Hampstead.

Architects : Samuel & Harding, A.A.R.I.B.A.

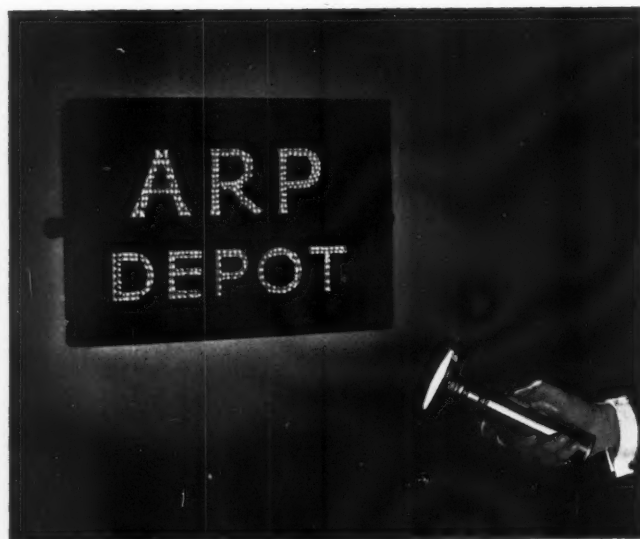
The general contractors were F. J. Moreton and Son, Ltd. Among the sub-contractors and craftsmen were the following:—Helical Bar & Engineering Co., Ltd. (reinforced concrete); Accrington Brick and Tile Co., Ltd. (bricks); Industrial & Domestic Heaters, Ltd. (central heating); Bratt Colbran, Ltd. (grates); Duncan Watson, Ltd. (electric wiring, bells); Merchant Adventurers of London, Ltd., Oswald Hollmann, Ltd., Troughton & Young, Ltd. (electric light fixtures); George Jennings, Ltd. (sanitary fittings); J. D. Beardmore and Co., Ltd., Dryad Metal Works, Ltd. (door furniture, window furniture); Rowe Bros., Ltd. (casements); D. W. Price and Co. (glass bricks); Shutter Contractors, Ltd. (rolling shutters); Veneers (Anglo-European), Ltd. (Donovan flush doors); Austin Compton Roberts, G. A. Harvey and Co., Ltd. (metalwork); Cork Insulation Co., Ltd. (cork floors); Cellulin Flooring Co., Ltd. (lino).

Kingsbury Swimming Pool.

Borough Engineer and Surveyor : Cecil S. Trapp.

The general contractors were Commercial Structures, Ltd. Among the sub-contractors and craftsmen were the following: Empire Stone Co., Ltd. (artificial stone, including cascades); Davey & United Engineering Co., Ltd. (heating installation); The Permutit Co., Ltd. (filtration and sterilization plants); The British Thomson-Houston (underwater floodlighting); Davis Contractors, Ltd. (hollow tile roofs and floors); Girlings Terra Concrete Co., Ltd. (artificial stone paving); Adamsez, Ltd. (sanitary equipment); Shaws Glazed Brick Co., Ltd. (glazed bricks, scum trough and coping); The Potter Rax Gate Co., Ltd. (wire baskets); Art Pavements and Decorations (terrazzo); The Composition Linolite Flooring Co., Ltd. (composition floors); John Ellis and Sons, Ltd. (Ema-lux surfaces); Drytone Joinery, Ltd. (teak doors and walnut panellings); Crittall Manufacturing Co., Ltd. (steel casements and folding steel doors); Highways Construction, Ltd. (asphalt work); Troughton and Young, Ltd. (electrical fittings); Charles Wicksteed and Co., Ltd. (diving equipment); British Art Tile Co., Ltd. (tile surround to pool); Le Grand Sutcliffe & Gell, Ltd. (turnstiles); Mellowes & Co., Ltd. (patent glazing to

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Liverpool Philharmonic Hall.

Architect : H. J. Rowse.

The general contractors were Morrison and Sons, Ltd., who were also responsible for the demolition, excavation, foundations, stone and stonework. Sub-contractors and suppliers included: G. M. Callender & Co., Ltd. (Callender's "Led-

kore" and lead dampcourses); Trinidad Lake Asphalt Co., Ltd. (asphalt); Trussed Concrete Steel Co., Expanded Metal Co. (reinforced concrete); R. Y. Ames (bricks); Liverpool Artificial Stone Co. (artificial stone); Redpath Brown & Co. (structural steel); Williams and Watson (glass); H. H. Martyn & Co. (cast lead and metalwork); Korkoid Decorative Floors, Ltd. (patent flooring); Sika Francois, Ltd. ("Sika" waterproofing compound); Richard Crittall & Co. (central heating, boilers and ventilation); Liverpool Gas Company (stoves); R. W. Haughton, Ltd. (gasfitting and plumbing); Higgins and Cattle, Ltd. (electric wiring, electric light fixtures, electric heating and bells); Rowe Bros., Ltd. (sanitary fittings); Quiggin Bros., Ltd. (door furniture and cloakroom fittings); Henry Hope and Sons, Ltd. (casements and window furniture); Automatic Telephone Co., G.P.O. (telephones); Waygood-Otis, Ltd. (rolling shutters and lifts); Mather and Platt, Ltd. (fireproof doors); Geo. Lowe and Sons, Ltd. (iron staircases); Hampton and Sons, Ltd. (plaster, decorative plaster, joinery, textiles and furniture); John Stubbs and Sons, Ltd. (marble and tiling); Conways, Ltd. (tiling); Walturdaw Cinema Supply Co., Ltd. (seating); Bath Cabinet Makers Co., Ltd., Frederick Tibbenham, Ltd. (furniture); Ronco, Ltd. (office fittings); Pilkington Bros., Ltd. (clocks); Daymonds, Ltd. (plastic letters, office fittings); Bull

Motors (Branch of E. E. & F. Turner, Ltd.) (Bull super silent motors).

Southfields Branch Library, Leicester.

Architects : Symington, Prince & Pike, F.F.R.I.B.A.

The general contractors were George Gurney & Sons. Among the sub-contractors and craftsmen were the following:—United Tile Manufacturers (bricks); Empire Stone Co., Ltd. (artificial stone); W. Richards, Ltd. (structural steel); J. A. King and Co., Ltd. (special roofings); Mellows and Co., Ltd. (patent glazing and dome lights); J. Hewetson and Co. (wood block flooring); Constone, Ltd. (patent flooring; terrazzo dados); Maddock and Wright, Ltd. (central heating); J. Orton (Electricians), Ltd. (electric wiring); Best & Lloyd, Ltd. (electric light fixtures); William Freer, Ltd. (plumbing); George Pick & Son (door furniture; metalwork, wrought iron gates and railings); Crittall Manufacturing Co., Ltd. (casements and window furniture); Samuel Elliott & Sons (Reading), Ltd. (revolving doors); Gypsum Mines, Ltd. (Sirapite plaster); Inglestants, Ltd. (furniture); J. Coles and Son (shrubs and trees); Evans Lifts, Ltd. (book lift); Gent and Co., Ltd. (electric clocks).

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The Directors of the Westminster Bank announce that the Chief Office of the TRUSTEE DEPARTMENT at 53 Threadneedle Street, London, E.C.2, has removed to temporary headquarters at

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which is the existing Trustee Office in that town: to this address all correspondence should be sent.

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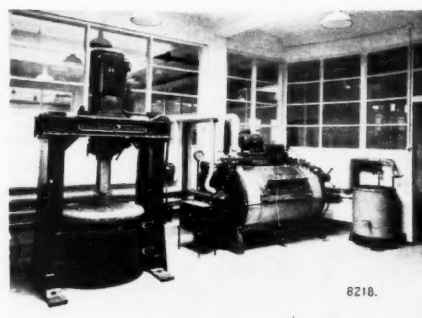


Fig. 8218—Installation for the treatment of Foul Linen at the Birmingham Hospitals Centre (The Queen Elizabeth Hospital.)

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BRADFORDS for CONCRETE

Trade News and Reviews

By

BRIAN GRANT



The old Doulton building has now been replaced by a more modern structure on a site further along the embankment. Dating from 1876, its Gothic windows, Classic balustrade and Moorish tower have made it a landmark to most people and an object of nostalgic veneration to some.

Marking Time

THE sudden change from a state of complacency to a state of emergency has produced—not unnaturally—considerable confusion in the building world.

The lot of the architect is indeed a hard one. Those that have work to do have more than enough of it; less fortunate members of the profession have nothing to do and long days and pitch black nights in which to do it. They are “reserved.” Reserved for what? Maybe we shall soon have the answer to this question.

For the present they must “mark time.”

Those architects, and there are fortunately a goodly number of them, who have been given work to do in connection with civil defence and what may be described as “defensive armaments” have problems in plenty before them. Taken off their normal work (precipitated, many of them, from their normal offices into sundry Government and local Council offices) they are grappling pretty frenziedly with a new set of problems and a new technique.

What I do decry in this present war, so far as it has gone, is the extent to which we are being subjected to “black out.” I refer not to our nocturnal discomfort—this we understand and accept—but to the quite un-understand-

able “black out” by day, the withholding of vital information which to most of us, whatever our trade or profession, is so essential if we are to be allowed to carry on with our jobs to the best of our ability.

Development and Research

Associations

One thing I have noted with surprise and disappointment is the absence from my mail and from the technical press of the type of sound and informative propaganda that the various Development and Research Associations have in recent years so regularly and intelligently indulged in. One must assume that these Associations are working in closest contact with the Government departments and authorities deputed to organize and expedite the progress of civil defence and emergency building operations. One must assume, therefore, that these Associations already know quite a lot and that in a very few weeks time they will know a whole lot more. All this, of course, is mere assumption. I stand to be corrected, but I trust that I am right.

Manufacturers I have spoken to feel very much the same way about things. They are “marking time” and are wondering rather distractedly just how long it will be before they are able to break into a slow trot. The right sort

of advice and technical information is more eagerly sought after now than ever it was before.

Architects engaged on non-Government work are finding it even more difficult to get information of any sort from any source—much to the irritation of their clients.

These are early days to be sure, and in fairness we must concede that the task in hand is one of considerable magnitude.

It is, though, to be hoped that helpful information will be released and publicised as and when it becomes available and that the various Development and Research Associations will lose no time in re-establishing a helpful contact with architects.

Shatter-resisting Varnish

In the past several weeks a new form of window decoration has been evolved. Competition is keen. Mrs. Jones, who first thought of uniting function and decoration, introduced a simple diamond pattern with neat effect. The Brownses, not to be outdone, went one better only to note with envy two days later that the Williamses quite capped the lot by a very “dinky” and most elaborate form of patterning. I refer of course to the gummed paper strips that are being plastered all over windows in order to

"The safest water mixing valves are THERMOSTATICALLY controlled suitable for working on unequal pressure supplies"

Board of Education Circular (Physical Training
Series, 14/1938).



Courtesy of Leicester County Council. Single
Showers, Loughborough Technical College.



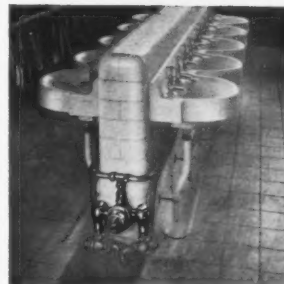
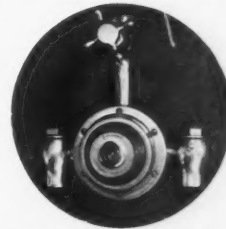
Courtesy of Walsall Borough Council.
Wash Fountain at Delves School.



Courtesy of Colly Hurst Nursery School,
Manchester.
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Leonard-Thermostatic water mixing valves, which have been used in hundreds of schools already over the last two years, are now recommended as standard practice for all schools. Hot water is everywhere used as if it cost nothing, but the coal bill of Institutions where it is used for washing show how far that is from the truth. Wherever group washing takes place, as in schools, factories, hospitals, barracks, passenger ships, holiday camps and such places, there is no need for every user to make his own blend of hot and cold. With Leonard-Thermostatic Valves, hot water can be supplied at the temperature best suited for the job in hand and those who provide it can determine the temperature at which it is to be used. Thereafter, the Valve will keep it there, no matter what fluctuations occur in the supply system. Leonard-Thermostatic Valves have been specified by more than a hundred leading Architects. They have been adopted as standard equipment by thirty County Councils and two hundred Municipalities.



Courtesy of Borough of Wednesbury.
Crew Road School, Walsall. Leonard Valve
on range of School Hand Basins.



Courtesy of the Leys School, Cambridge.
Leonard Valve on Boys' Showers over
Plunger Bath.



Courtesy of G. Hart, Esq., M.I.V.E.,
Birmingham Educational Committee.
Leonard Valve on Boys' Tunnel Shower.

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The new G.E.C. cooker model DC105. Amongst other features it contains the largest grill boiler unit ever fitted to a cooker of this size.

render them less dangerous in air-raid time.

Now the Jones', the Brownes and the Williamses are all very disgruntled because the Smiths' a little further down the road have discovered an almost colourless transparent varnish which when applied by brush or spray to both sides of the window performs precisely, and rather more effectively, the same job as the gummed paper without reducing the light transmission to anything like the same extent.

Cerrux shatter-resisting varnish is made by Cellon Ltd.—its application ensures a tenacious, tough, elastic and almost colourless film which considerably increases the resistance of any glass structure to blast and shatter. Two coats are necessary and may be applied by brush or spray. Covering capacity is 40/45 square yards per gallon, drying time 4 to 6 hours and price per gallon twenty shillings retail.

I imagine that most good builders' merchants and ironmongers will carry stocks but should you have difficulty in obtaining supplies get into touch with Cellon Ltd., Kingston-on-Thames. Telephone number, Kingston 1234.

Adaptability

With commendable celerity have many manufacturers switched over from peace work to war work; indeed, one dare not these days hazard a guess at what might be going on behind the innocent-looking façade of any factory or workshop.

Perambulator factories may now be turning out machine guns, though weddings have been so numerous in the past few weeks that one cannot foresee a very rapid falling off in the sale of baby buses. Unpleasant to reflect that the chubby, red cheeked infant pushed hither and thither twenty years ago in Messrs. So-and-So's perambulator de-luxe may tomorrow be squatting in some sodden, camouflaged emplacement surrounded by the same Messrs. So-and-So's super-deadly 1939 model machine guns.

In the building industry many strange transformations have been effected. Ecclesiastical woodworkers, whose craftsmen in peaceful days carve fine reredoses, are now making A.R.P. equipment, furniture for camps and hospitals and gas-proof screens and shutters. Metal craftsmen are making tubular steel stretchers and hospital beds. Furniture manufacturers and upholsterers have forsaken Chippendale and Heppelwhite for canteen benches, sandbags and hospital mattresses. At least so I am informed—but Dame Rumour is infernally busy these days.

Design in the Kitchen

The ship-shapeliness of the contemporary kitchen is something that we have to be truly thankful for.

It is not a very far cry back to the old basement kitchen, large and replete with dirt traps; the huge open grates, so uneconomic and so thirsty for black lead; the clumsy open dressers har-

bouring in their many cracks and crevices the strangest battalions of germs and insects. How invidious was the lot of the old-fashioned Sarah Jane.

Now Sarah Jane has gone (bless her heart how she laboured!) and the modern Myrtle, trim and perky, trips around her glistening stream-lined apartment whilst her favourite crooner bumbles about "lurve" to the romantic strains of Harry Roy's band.

Latest G.E.C. electric cooker is illustrated on this page. This new model DC.105 is a larger addition of model DC.100 which was described in these notes some months back.

Its dimensions are 42 ins. high, 25 ins. wide and 23½ ins. deep and its total loading is 8,400 watts.

Without ovenmaster it costs £17 10s.; the de luxe model finished in white porcelain with coloured fittings costs £21. (The General Electric Company, Magnet House, Kingsway.)

Water Heaters for Decontamination Showers

I have received details, and photographs, of a recently completed decontamination shower centre installed at the A.R.P. headquarters in Camden Town. A photograph showing a corner of the shower room is reproduced below.

The main apparatus consists of a large G.E.C. storage heater of 300 gallons capacity. The heater has a galvanized steel interior efficiently lagged with



A section of an A.R.P. decontamination shower installed by the G.E.C. The mixer valve which maintains the required temperature is fixed at the top of the right-hand wall near the corner.

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TRADE AND CRAFT

regranulated cork; the exterior steel casing is enamelled in white, the inside surface being treated with non-corrosive stoved paint. Incorporated with the heater is a chromium-plated water-mixing valve for regulating the shower temperature; adjustment of the valve is operated by a removable key so that when the required temperature has been obtained removal of the key makes it impossible for the pre-determined temperature to be exceeded. The total loading of the heater is 27 kilowatts.

An appeal for standardization

Immediately after Mr. Chamberlain's fatal announcement on September 3rd householders in and around London, and other cities and towns considered vulnerable to Goering's much advertised air arm, indulged in a quite hectic game of general post. Hundreds of people found when they got into their new temporary homes that their electric cookers, refrigerators, vacuum cleaners, wireless sets and etc., etc. were unworkable. New and costly armatures had to be fitted, the old lamps were unsuitable, new elements had to be purchased for the electric fires and a goodly bill had to be run up at a time when all were trying hard to practice strict economy.

It is high time that the electricity magnates gave us standardization. Manufacturers of electric appliances will surely

welcome the move every bit as much as the sorely tried general public.

We know that steps are being taken—for heaven's sake let's get the job done. It'll soon be 1940 and electricity is not very newborn.

Old and New Addresses

In a postbag filled with notifications of changed addresses I have a communication from Messrs. Doulton advising that they are maintaining their headquarters in Lambeth. They are, however, making a move in the immediate future—a move of approximately 300 yards—as their new Head Office on the Albert Embankment is nearly ready for occupation. I suppose this means that the old Doulton building, illustrated at the head of these notes, strangest and one of the best known of all buildings on the south bank of the Thames, is due for demolition. One will regret its passing, it has for so many years provided relief in a district devoid of any other sort of interest at all. What, I wonder, shall we see in its place?

The new Doulton building, six storeys high, has been designed to exemplify the many uses of modern ceramic materials in contemporary construction and decoration. T. B. Bennett & Son are the architects.

Other notifications of changed addresses include the following:—Communications to Bakelite Ltd. should be addressed to Brackley Lodge, Brackley, Northamptonshire. The British Aluminium Company are in residence at The Raven Hotel, Shrewsbury. Holland and Hannen & Cubitts Ltd. have moved to Ivy House, Inner Park Road, Wimbledon. Also in Wimbledon are Holloway Brothers Ltd., The Priory, Wimbledon Common, and J. L. Keir & Company, 88 Wimbledon Hill. The London office of Mellows & Co. Ltd., have moved to "Fairleigh," 38 Priest Hill, Caversham, Reading.

There are very many more. Should you have any difficulty in tracing the whereabouts of any firm in the building industry, or any firm of architects, telephone The Architectural Press—Vigilant 0087.

Barricades

The sandbag barricades look awkward and out of place. That they are inelegant in appearance does not really matter one jot; what does matter is that many of them have been built up so awkwardly that they will, when put to the test, prove sadly inadequate. This criticism does not apply to the work of local authorities who have known long enough the correct methods, but to the private individual who has done his energetic best without



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Fourteen tons of "Stippolo" Oil Bound Water Paint is the estimated amount used on these 120 feet high towers and their camouflaged appearance is causing considerable interest throughout the country.

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The illustration is by kind permission of John Mould, Esq., General Manager, City Electricity Service, Leicester. The colour scheme was designed and supervised by E. Townsend, Esq., Cathedral Studio, 31 Full Street, Derby.

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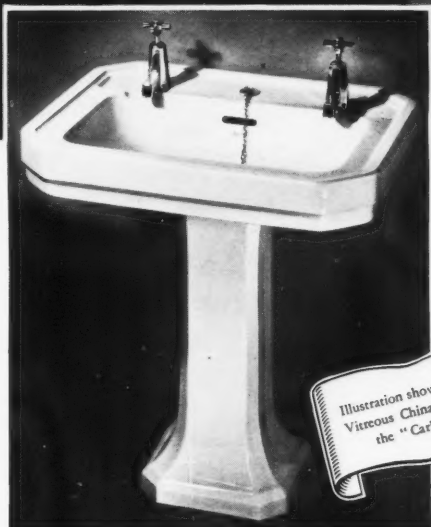


Illustration shows Shanks' Vitreous China Lavatory the "Carlford."

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realizing that even the laying of a sandbag calls for some sort of technical knowledge. The building of sandbag walls is, by the way, dealt with in an Air Raid Precaution Handbook issued by the Home Office.

Rot-proofing of Sandbags

Sandbags used for barricades in the open should be submitted to some form of rot-proofing process. I was shown a month or so ago a photograph taken in June 1939 of a sandbag barricade erected in September 1938—the hessian sacking was already in an advanced state of decay, sand was gradually but continuously escaping from the burst sandbags and the barricade was in such a state of disintegration as to make collapse imminent. There are many rot-proofing processes and none of them are costly. It is claimed that by the Cuprinol process sandbags are rendered permanently rot-proof at a cost of no more than 1d. per bag treated and I am told that this process is used by the Admiralty, War Office, Air Ministry and many of the principal Government Offices. Replacing sandbags at a later date will be an expensive and troublesome task, if indeed they are obtainable. To leave barricades unprotected is a foolish and dangerous extravagance. The distributors of Cuprinol products are Messrs. Jensen & Nicholson.

The Buildings Illustrated

House at Welwyn Garden City

Architect: E. C. Kaufmann

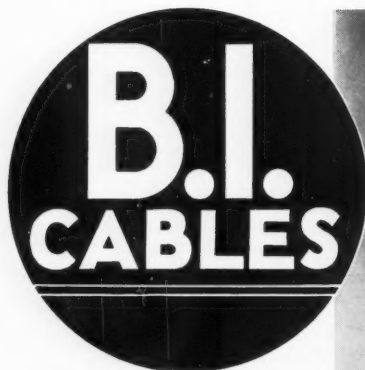
The general contractors were Viner & Son Ltd. Among the sub-contractors and craftsmen were the following:—G. M. Callender & Co. Ltd. (dampcourses), Hertingfordbury Brick Co. (bricks), A. D. Dawney & Sons (structural steel), Williamson Cliff Ltd. (tiles), D. Anderson & Sons Ltd. (macasfelt for special roofings), Wellinlith Ltd. (partitions), James Clark & Son Ltd. (observed glass in bathroom and W.C.), R. Cattle Ltd. (wood block flooring, joinery, furniture), Cork Insulation Co. Ltd. (cork flooring in bathroom and kitchen), W. Richardson & Co. Ltd. (central heating), G. Matthews Ltd. (fireplace in living-room), Ideal Boilers and Radiators Ltd. (boilers), Phoenix Electrical Co. Ltd. (electric wiring, electric heating), New Light Fittings Ltd. (electric light fixtures), Alfred Goslett & Co. Ltd. (sanitary fittings), Stanley Jones & Co. Ltd., J. D. Beardmore & Co. Ltd. (door furniture), Crittall Manfg. Co. Ltd. (casements), Loft Ladders Ltd. (loft ladders), O'Brien Thomas & Co. Ltd. (Coburn track to sliding door between living- and dining-room), J. Starkie Gardner Ltd. (metalwork), E. Barton & Co., Ltd. (tiling), John Line & Sons Ltd. (wallpapers),

F. C. Courten Ltd. (shrubs and trees), Permutit Co. Ltd. (water softening plant), Henry Wiggins & Co. Ltd. (monel metal sink), Sparton Refrigerator (refrigerator), Servis Co. (Servis washing machine).

Offices in the Adelphi building

Architect: Michael Rachlis

The general contractors were Gee, Walker & Slater Ltd. Among the sub-contractors and craftsmen were the following:—William Mallinson & Sons (supplied veneers as follows: Courbaril, general office and visitors' lounge; English plane, board room; Indian greywood, Stripey ash, Peroba, English elm, private offices; Peroba, directors' lobby), Troughton & Young Ltd. (electrical wiring and installations), Architectural, Constructional & Electrical Utilities Ltd. (electric ceiling fittings and wall brackets, anodically treated in silver, gold and black; aluminium window frame to mailing room and aluminium radiator grilles and door grilles), Comyn Ching & Co. Ltd. (aluminium door furniture), Art Metal Construction Co. Ltd. (barrier to entrance waiting room gates), Acorn Products Ltd. (aluminium wastepaper baskets, anodically treated in silver and gold, also aluminium desk sets), Best & Lloyd Ltd. (aluminium desk lamps), J. Avery & Co. Ltd. (aluminium sunblinds), Melson Bros. (upholsterers), Norman Plumridge Ltd. (carpets).



This magnificent new Capetown building consists of a modern theatre surrounded by 49 Flats, the whole of the premises being wired with **B.I. Cables**. Each flat is equipped with electric hot water cylinder made with **B.I. Copper Sheets and Discs** by Messrs. Albert Vaux & Co., (Pty) Ltd., Capetown. Consulting Engineers: Messrs. Viljoen & Keyter, Capetown. Electrical Contractors: Messrs. Edward A. Shaw & Co. (Pty) Ltd., Capetown.



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From “The Elements of Architecture,”
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SIR HENRY WOTTON coined this splendid phrase to describe the essentials of “well building.” “Firminesse, commoditie, and delight” were his three conditions; as desirable then as they are to us in the twentieth century. Only with this difference: that science has given us means to those worthy ends undreamed of in 1624.

Today, when the architect wishes to make his work strong, spacious, comely, and a fitting expression of the spirit of his times, he does not lack beautiful, enduring, and tractable materials.

He has steel for the skeleton of his

buildings; concrete for the fabric. He has bricks of a dozen different sorts, tiles, marble, and stone from a wide world of quarries. Science and research have given him new kinds of glass, plastics, and aluminium, with their exciting possibilities, and not a year goes by without perfecting some new material or method to simplify his work.

This is particularly true of aluminium. Although most architects know that aluminium is strong and one-third the weight of steel, is rustproof

and crackproof, resists corrosion and retains its bright beauty with the minimum of cleaning, there are always improvements in alloys and new applications for sheet, extruded sections, forgings, and castings unfamiliar to those outside the aluminium

industry. We would like to draw your attention, therefore, to our Advisory Service Department which is equipped to answer any technical question concerning the use of aluminium in architecture. At present, however, we are only in a position to fulfil Government contracts and sub-contracts for the supply of aluminium.



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Trade News and Reviews

By BRIAN GRANT



Messrs. Troughton and Young's new protected shop front designed by A. B. Read in black, buff and emerald green colourings.

The Building Front

NEWS from the building front is not encouraging. There would appear to be ample evidence to show that with a little bit of clear thinking on the part of officialdom the position generally could be considerably improved and the unemployment figure considerably reduced. It does seem that the work in hand could with benefit be distributed amongst a greater number of firms. Certain architects, quantity surveyors and building firms are getting the lions' share whilst others are getting no share at all—on the one hand you hear complaints that "they just can't cope with it," in another quarter you find idle brains and hands wishing like hell that they had something to cope with.

This should not be. It is entirely unjust that the few should profit and the many suffer.

We know that the Government's programme must be carried out with all expediency, that the major consideration must be "getting the job done with the least possible delay" and it was natural therefore that a few individuals and a selection of most suitable organizations should be given the responsibility of supervising and planning. Too many "cooks" at the head of affairs would be likely to multiply confusion.

It is to my mind, however, imperative that the interests of the whole of the building industry be considered; the

actual execution of work must be shared out, the smaller firms must not be left to languish and finally expire through a prolonged period of enforced inactivity. Better that the majority shall be enabled to carry on with a minimum of hardship and loss, than that the few shall be kept going busily and profitably to the extinction of the many. With time on my hands I have had much opportunity during the past few weeks for journeying round and about London and the southern counties and have made it my business to be exceedingly inquisitive. What I have seen and heard has not been reassuring.

Let it be agreed that there must and should be centralization of supervision and that the larger firms in the industry are better staffed and organized to undertake control; control, however, should not permit such organizations to delegate the whole of the work to themselves. Control and supervision should incorporate a plan to distribute the work as widely over the whole of the industry as expediency will permit. It is certainly not politic, and surely it cannot be expedient, to have one third of the industry struggling to get through so large an amount of work that they can scarcely cope with it whilst the other two thirds stand by competent but idle.

One possible solution to the problem would be the appointment of District Supervisors in different areas throughout the country who would be responsible for arranging that the work in his area be

distributed as fairly as possible amongst all those firms capable of carrying it out efficiently and expeditiously. In each area the various sections of the industry (architects, surveyors, general contractors, electrical contractors, etc.) would nominate their own individual representatives; these representatives would be kept fully informed about all building work to be carried out in the area, and would plan the letting and sub-letting of all contracts. All this may sound a trifle involved and irksome, in fact it is not even novel. Building "rings" have been in operation for many years, their motives have not always been entirely meritorious; usually they have been formed to obviate cut-throat competition, sometimes co-operation of this sort is indulged in so that the participants may make grossly exaggerated profits. Whatever the motive they have worked, mostly, and in times such as these there is an urgent need for goodwill and beneficent co-operation. "The survival of the fittest" is an old war cry, but on the home front co-operation is a much saner policy than each man for himself.

In regard to the selection of building materials—here again we find that the building front is composed of the "haves" and the "have-nots." Certain manufacturers are working at over-pressure in order to fulfil the demands being made of them whilst others are despondently inactive—it would seem that insufficient consideration is being given to alternatives. The powers that be having at the outset decreed that a certain material

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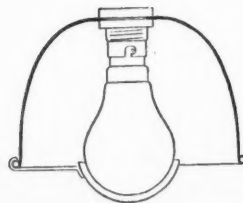


Two lighting reflectors designed and produced by the Holophane Co. for black-out conditions. Above, and in section on the right is a reflector of .002 foot-candles intensity for the exterior illumination of factory and railway yards, docks, etc. The example below of 0.2 foot-candles intensity is designed for interior use in covered entrances or loading bays.

must be carefully reserved for "Government priority" are now demanding practically the whole of the country's output of those particular materials whilst the manufacturers of entirely suitable alternative materials are nursing an unwanted stock.

Timber, mostly imported softwoods, is being used for construction to such an extent that there is or may be in the immediate future an embarrassing shortage of available supplies. British bricks from British clay are, I understand, available in large quantities and many brick manufacturers would like to know what future demand they should be prepared to cater for. If this international quarrel is going to last two, three or four years then we must plan ahead. Industry must be well informed and given every opportunity of planning ahead for its own preservation; if the quarrel is eventually going to turn into a real war then we shall find ourselves compelled to rely more and more on the use of home materials. In the building and the agricultural industries we should now be giving every encouragement and the greatest possible measure of support to home production.

TRADE AND CRAFT



SECTIONAL DIAGRAM OF LAMP AND REFLECTOR

One other point before I bring this somewhat baneful harangue to a conclusion. Way back in 1938 and earlier visits of inspection were paid to factories in all parts of the country and plans were made for many firms to switch over, wholly or partially, immediately on the outbreak of war to the production of war materials and equipment.

In the main these plans have now been put into operation, but in some cases manufacturers are without instructions and have, therefore, certain sections of their machine shops standing idle.

They await the "Go-ahead" signal and will be not a little relieved when it is given.

Light in the Black-out

Lighting catalogues these days are really rather amusing, the designer of fittings has had to put himself into reverse gear, as it were, and design fittings that provide not a maximum of light but a minimum and all the old standards of efficiency and foot-candles intensity play no part at all in current considerations. (Double meaning not intended.) Of course, I am referring to fittings for exterior illumination.

As it will not be possible to suspend all outside work during the hours of darkness, some lighting has to be permitted for essential work of national importance in such places as factory yards, docks and railway yards. (We should, indeed, be permitted a minimum of lighting in the streets, but more about that anon.)

The Holophane Company have produced a range of special lighting fittings for different black-out requirements and describe some of these in a small brochure they have just issued. The fitting illustrated at the top of this page is a British Standard A.R.P. unit designed for the illumination of factory, railway and dock yards. The units are constructed of heavy gauge sheet steel with cup and supports arranged to clip on the rim; a 1½-in. hole at the top enables the unit to be fitted to a B.C. shade carrier lampholder. Three finishes are used inside the reflectors so as to give the different candle-power intensities according to the mounting heights. These units must be vertically hung and should be spaced apart at distances not less than 4 times the mounting height; the mounting height should not be less

than 10, 15 or 20 ft. according to the type of reflector finish selected.

It is made in two sizes costing 4s. and 6s., respectively.

The second unit illustrated is a special prismatic reflector designed by Holophane for fitting to any existing B.C. holder and for use in covered entrances, loading bays and corridors where the light does not fall on open ground; it gives a higher illumination value than the B.S. unit, in fact 0.2 foot-candles intensity as against 0.02 or 0.002. The unit consists of an opaque metal cover fitted over a prismatic reflector and is designed to give efficient and uniform lighting over an extensive area when spaced at a distance apart of twice the mounting height above the floor; it costs, minus the lampholder, 6s. 6d. (Holophane, Ltd., Elverton Street, Vincent Square, London, S.W.1.)

Concerning street lighting, is it not just about time that a little light was shed upon this unreasonably dark subject? Certainly the Home Office authorities were extremely wise in enforcing the most stringent restrictions at the outset, but having now succeeded in establishing a complete black-out and with the knowledge that the stage is set, as it were, for an immediate response to any danger warning, need they continue with their insistence upon utter blackness? Happily, I am able most nights to dig myself in by the fireside, pull the curtains to and forget the black-out, but I have had a small share of night travel and can't pretend that I enjoyed it. I have studied the black-out from the point of view of the motorist, the pedestrian, and the railway and omnibus passenger and extend my unreserved sympathy to all those unfortunate people who have to be out and about after the sunset hour. One wonders what sort of special compensation or remuneration is being awarded to omnibus drivers these days, and hopes that due recognition is being given to their valour. They are doing their "bit"; indeed, in this strange and unreal war so far as it has gone, there are more arduous tasks being performed on the Home Front than anywhere on the Western Front. Is it not a fact that the death and injury toll on the roads is equal to or higher than that in the fighting zone?

Questions concerning street lighting have recently been raised in the House of Commons and Sir John Anderson in reply said that experiments had been made and were still in progress but that there were numerous objections to any of the suggestions so far put forward by illuminating engineers and consultants. I am surprised to learn that "only in a very few towns" is the street lighting controlled by a central control switch so that the whole of the lighting could be extinguished at a given signal and



Priority

must, without question, be given to National requirements but, in war as in peace, the services of this Company's Technical Staff and copies of their numerous publications are at the disposal of those interested in the metal and its applications.

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believed that, with the advent of the grid, lighting systems in all our major towns had been completely modernized. One must not forget, of course, that at least half the street lighting in the country is by gas which cannot generally be extinguished from a central point.

Is it not possible, however, to devise a type of modified street lighting of such low intensity that it would scarcely be visible to raiding aircraft, so that, where delay might occur in the extinguishing of such lighting, no effectual assistance would be given to the raiders even if the lighting was on during the progress of the raid? Perhaps some of our leading Industrial Lighting Engineers may be able to supply some interesting data on this very dim subject. Heaven knows, the Home Front can do with a little brightening!

Design in the Black-out

I like very well A. B. Read's solution of the display window problem though I think that he could with advantage have introduced more white in the façade at about eye level—a broad band of white across the whole length of the front, flush with either the bottom or top of the small display windows, would have served as a welcome aid to

despondent pedestrians on the blackest of black nights. As it is, however, the Troughton & Young shop front will be a helpful landmark by night, and by day how much more pleasant it is to look at than the usual sandbagged boarded-in efforts that seem to shout out aloud "Business here is far from as usual."

Refrigeration in the country

In the past few weeks I have received many anxious enquiries regarding refrigeration in the country. Town-birds now occupying cottages miles away from a mains supply of any kind are wondering just what they are going to do when the summer of 1940 arrives.

I have two suggestions to offer. In the first place one can still obtain those stone cooling cabinets that work very much in the same way as the Woolworth butter cooler; it will be found that they keep things quite satisfactorily cool, though of course nowhere near freezing. These cabinets vary in price from about 30s. to £3 or £4 according to size. For those who would wish for a greater degree of refrigeration I would recommend the oil-operated Electrolux refrigerator. This (it has been on the market for many years) is a perfectly ordinary refrigerator which works in the same way as the gas-operated type, the only difference being that it is not quite so easy to control the freezing rate.

Zinc Development Association

In these notes last month I referred to Development Associations and suggested that they could be of great service to architects, builders and other technicians now busily engaged on emergency building work. Most of these Associations are of comparatively recent vintage but they have, some of them, very rapidly established a most useful contact with architects.

I have on my files a number of technical handbooks issued by various Development Associations to which I am, or was in happier times, constantly referring and I know that architects generally are fully appreciative of the helpful technical services that have been rendered by such Associations in recent years. In the present emergency there is more than a little confusion and any useful technical information that is made available relative to emergency building practice will be well received.

In reply to my notes of last month the Zinc Development Association write advising me that their technical services are still fully available to architects and are being rapidly supplemented by information concerning new regulations and orders, they also state that informative announcements will be published in their advertisements in architectural and building journals.

The Zinc Development Association's war duration address is Lincoln Building, 18, Turl Street, Oxford. Telephone number Oxford 47988.

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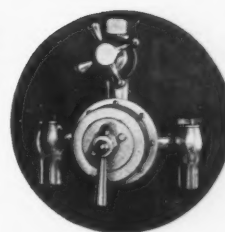
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IN HOSPITALS & INSTITUTIONS



Chichester Hospital, equipped with Leonard Valves. Architect: C. G. Stillman.

Photo by courtesy of Architectural Press, Ltd.

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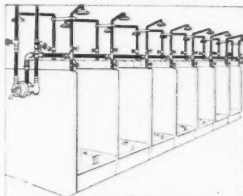
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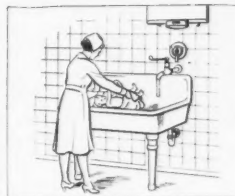
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TRADE AND CRAFT

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"Thermovent News," a monthly bulletin issued by E. K. Cole, Ltd., devotes its current issue to A.R.P. heating problems and solutions. The contents are sub-divided to deal with the heating requirements of shelters, first-aid centres, emergency hospitals and emergency business premises.

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Copies of this bulletin are obtainable from E. K. Cole, Ltd., Southend-on-Sea.

The Buildings Illustrated

The Village College,
Impington, Cambridgeshire.
Architects: Walter Gropius
and E. Maxwell Fry.

Engineers.....R. T. James and Partners
Quantity Surveyor...William G. P. Potter
Clerk of Works.....F. S. Chappell
General Foreman.....A. E. Sheldrick
Foreman Joiner.....S. Quinney
" Carpenter.....H. B. Hinde
" Plumber.....W. Hunt
" Bricklayer.....F. I. Greenall
" Painter.....C. H. Cooper
Ganger Labourer.....A. A. Shead

The general contractors were Johnson and Bailey Ltd. Among the sub-contractors were the following: Williams and Williams Ltd. (metal windows), Granwood Flooring Co. Ltd. (flooring and underfloor heating), Brickart Ltd. (facing bricks), P. H. Allin and Sons (electrical contractors), Powers and Deane, Ransomes Ltd. (structural steelwork), F. McNeill & Co. Ltd. ("Foamagg" partition blocks), Whitehead Iron & Steel Co. Ltd. (concrete reinforcement), John Bolding and Sons Ltd. (sanitary fittings), Smith and Wellstood Ltd. (cooking range), The Parkinson Stove Co. Ltd. (warming chamber in kitchen), Cambridge University and Town Gas Light Co. (gas carcassing), Potter Rax Gate Co. Ltd. (cloakroom fittings), Septic Tank Co. Ltd. (sewage disposal), Donovan Flush Doors (flush doors (metal faced)), Merchant Trading Co. Ltd. (flush doors (Alder faced)), Cambridge Artificial Stone Co. Ltd. (reconstructed stone copings), Celotex Ltd. (Acousti

Celotex), Tentest Fibre Board Co. Ltd. (insulating boards for ceilings), Masonite Ltd. (hardboard), C. A. and A. W. Haward (metalwork), J. Starkie Gardner Ltd. (commemorative tablet), Tile Decorations Ltd. (floor and wall tiling), W. H. Dean and Son Ltd., Richmonds Gas Stove Co. Ltd., Staines Kitchen Equipment Co. Ltd., General Electric Co. Ltd., General Iron Foundry Co. Ltd., Burco Ltd. (domestic science room equipment), Cubax Kitchen Cabinets Ltd. (kitchen cabinet), A. J. Binns Ltd. (ironmongery), James Clark and Son Ltd. (glazing), Cellulin Flooring Co. Ltd. (lino covered floors), Highways Construction Co. Ltd. (asphalt tanking and roofs), H. C. Hiscock Ltd., Merchant Adventurers of London Ltd., Troughton and Young Ltd. (electric lighting fittings), Strand Electric & Engineering Co. Ltd. (stage lighting fittings), Gent & Co. Ltd. (electric clocks), Nobel Chemical Finishes Ltd. (paint and distemper—"Dulux"), Mander Bros. Ltd. (paint and distemper), Walpamur Co. Ltd. (paint and distemper—"Walpamur"), Hunter and Hyland Ltd. (curtain tracks), Ernest Race Ltd. (curtains), Finmar Ltd., Thonet Bros. Ltd., Fredk. Parker and Sons Ltd., Henry Stone and Son Ltd., Wring & Co. Ltd., Mann Egerton & Co. Ltd., Kerridge (Builders) Ltd. (furniture), Stonehenge Brick Co. (sand lime bricks for interior facings), W. T. Lamb and Sons (dark brown facings), London Brick Co. (Fletton bricks).

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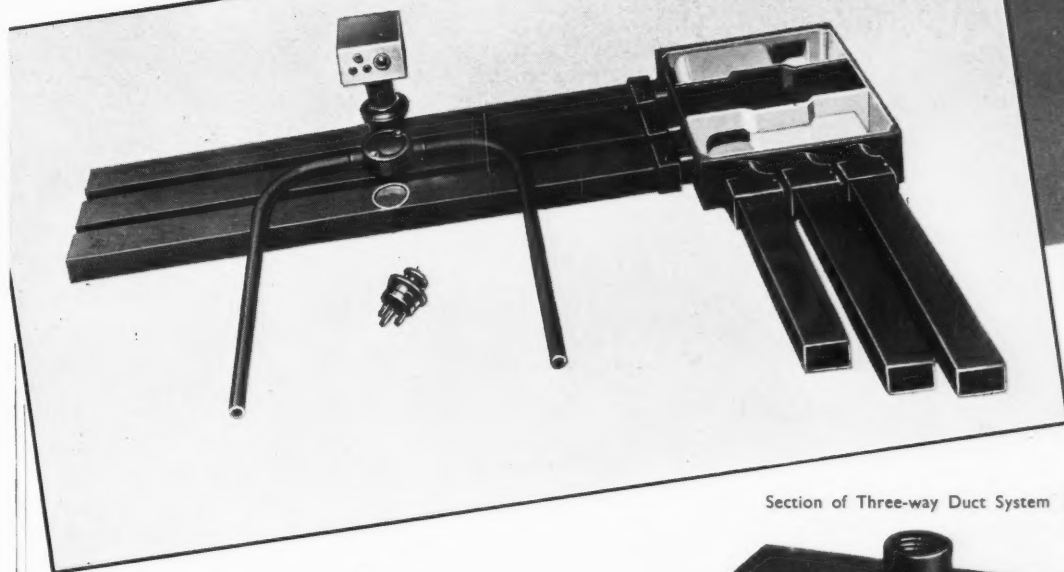


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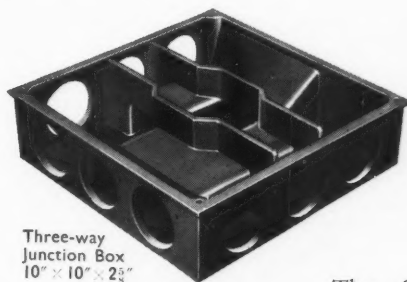
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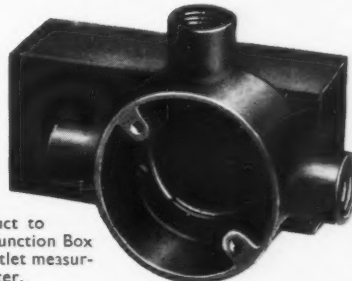
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Architect : C. Cowles-Voysey.

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Greenwich Town Hall.

Architects : Culpin and Son.

Quantity Surveyors...Harris and Porter Consulting Structural Engineers

R. T. James and Partners Consulting Heating and Ventilation Engineers...J. Roger Preston and Partners Consulting Electrical Engineer D. Winton Thorpe, in association with Waldo Maitland

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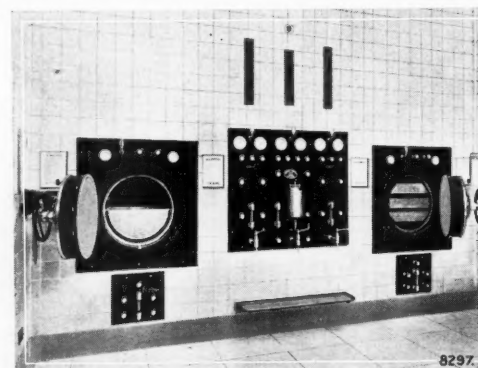


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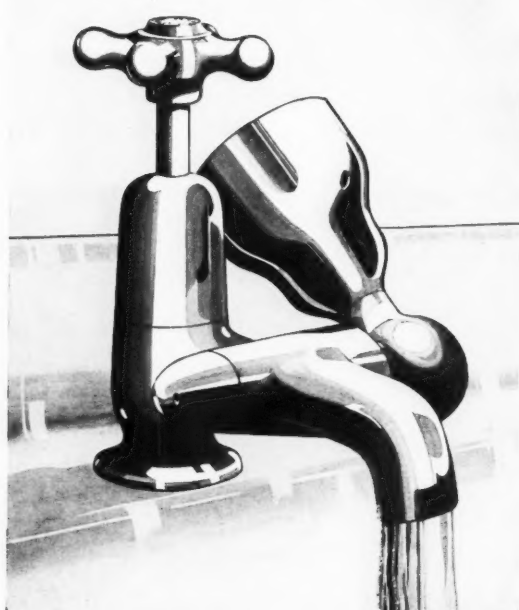
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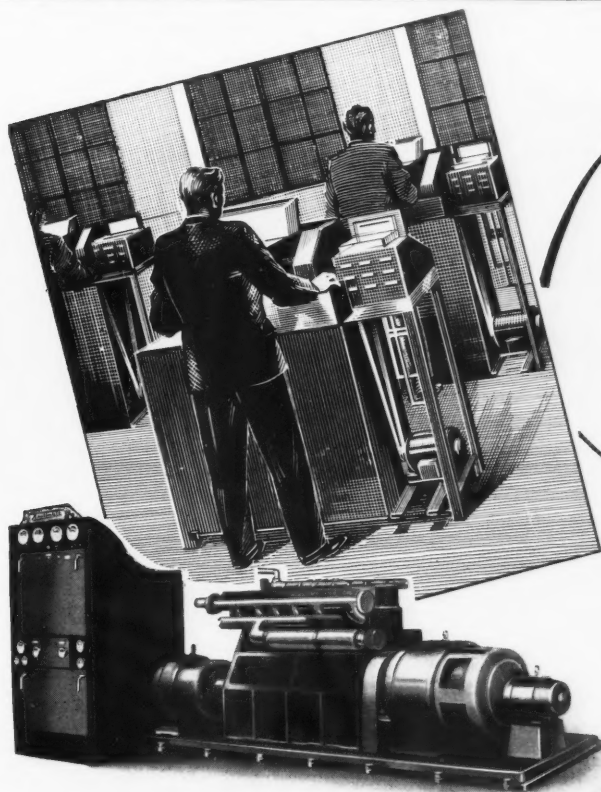
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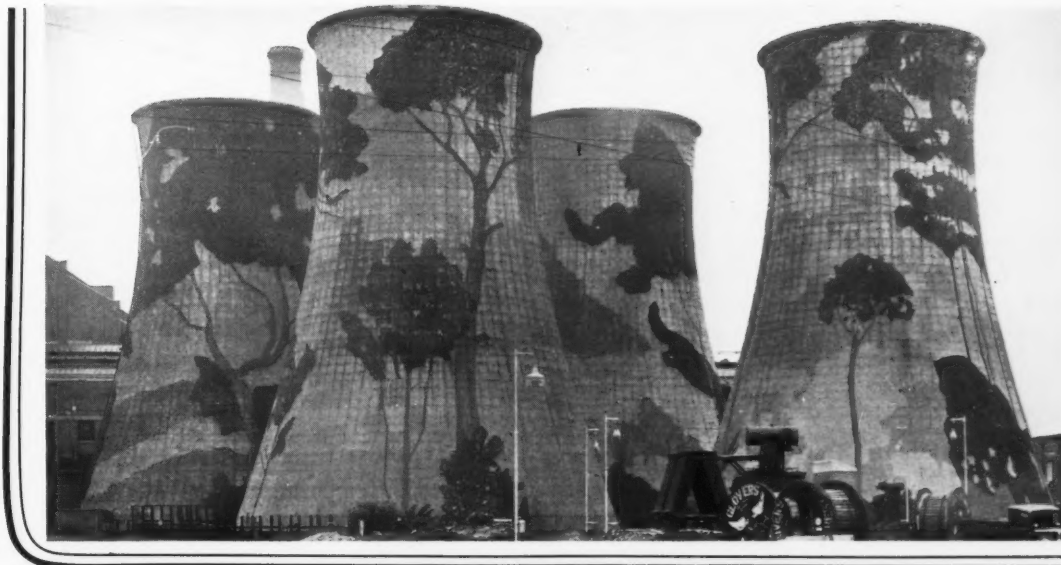
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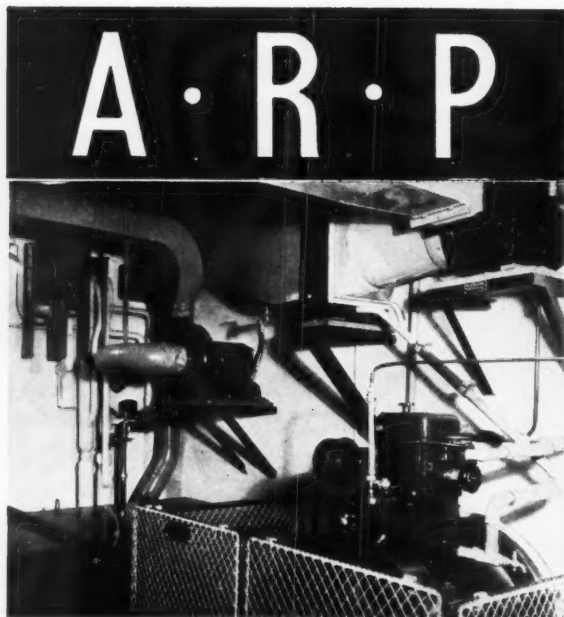
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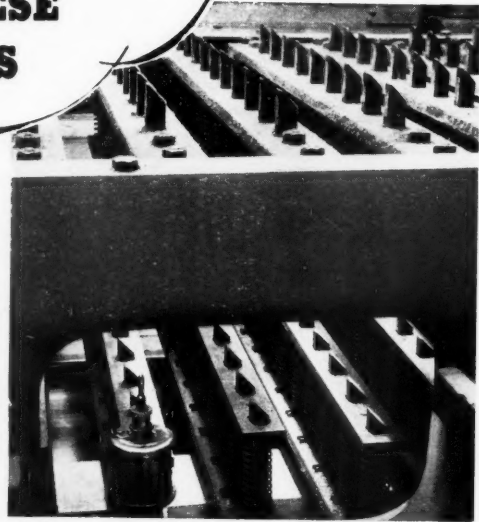
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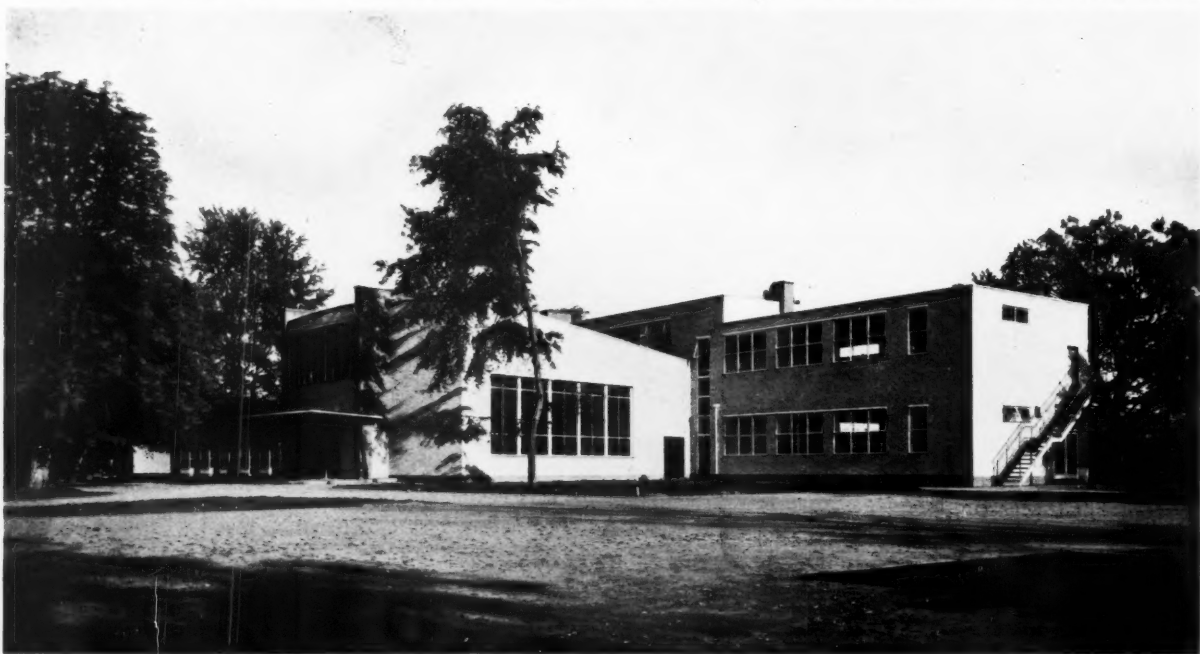


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